

20000806.qrp v01_n905.qrl.20000806

Date: Sun, 6 Aug 2000 19:03:11 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1905

QRP-L Digest 1905

Topics covered in this issue include:

- 1) [76685] Re: Direct Conversion Receivers
by "Walter Dufrain" <walter@inlink.com>
- 2) [76686] For Sale : 2m HT,2m mobile, HF QRP,butternut minibeam, vertical
40-2m
by "Armin Hachmer" <armin@muskoka.com>
- 3) [76687] Fw: For Sale : 2m HT,2m mobile, HF QRP,butternut minibeam, vertical
40-2m
by "Armin Hachmer" <armin@muskoka.com>
- 4) [76688] Ft. Tuthill and other hamfests/swapmeets
by Jim Lowman <jmlowman@ix.netcom.com>
- 5) [76689] QRP in Tucson?
by Bill Walker <windal@azstarnet.com>
- 6) [76690] Re: QRP in Tucson?
by GElam30092@aol.com
- 7) [76691] the line is busy?
by "Armin Hachmer" <armin@muskoka.com>
- 8) [76692] Re: Ft. Tuthill and other hamfests/swapmeets
by Jim Durkin <jimdurkin@yahoo.com>
- 9) [76693] Fw: FOX: Big Dawgs Overtaken!
by w2xn@juno.com
- 10) [76694] K2 #621 sold
by "Doug Hendricks" <ki6ds@dospalos.org>
- 11) [76695] Antenna Tuner adjustment question
by "Craig B. Johnson" <cbjohns@mn.mediaone.net>
- 12) [76696] Fox: Dawgs and Ratz
by Pete Burbank <plburbank@kih.net>
- 13) [76697] QRP LF at 480 kHz
by W0rw@aol.com
- 14) [76698] Re: BUBBA 2000
by "Mike Yetsko" <myetsko@insydesw.com>
- 15) [76699] Re: Hamstick radials
by "Geoff QRP-L mailing list" <geoffqrp@wormhole2.com>
- 16) [76700] BUBBA 2000
by Bob Hightower <nk7m@extremezone.com>
- 17) [76701] Renewable energy applications to QRP transceiver.
by "Christian Castillo" <chcastillo@planetarymotion.net>
- 18) [76702] Re: True Portable HF

- by Jim/Julia <w7ls@blarg.net>
- 19) [76703] Re: How to pack mobile antenna
by Jim/Julia <w7ls@blarg.net>
- 20) [76704] Ft. Tuthill Report and other stuff (long)
by "Doug Hendricks" <ki6ds@dospalos.org>
- 21) [76705] Intermittant Delivery Through AOL
by DYARNES@aol.com
- 22) [76706] NAQP QRP w/ Norcal NC40a
by "K7FD-N7SG" <cqdx@teleport.com>
- 23) [76707] OOPS! NC20 Xtal toasted
by "Rod, N0RC" <n0rc@qsl.net>
- 24) [76708] Re: OOPS! NC20 Xtal toasted
by Phil Wheeler <w7ox@earthlink.net>
- 25) [76709] Re: Antenna Tuner adjustment question
by Rick Arzadon <n8xi@juno.com>
- 26) [76710] trade
by ac5ez@webtv.net (K1zw)
- 27) [76711] True Portable HF
by "Karl F. Larsen" <k5di@zianet.com>
- 28) [76712] Antenna Case...
by "Bruce & Tosh Hopkins" <makai@grouper.batelnet.bs>
- 29) [76713] K1 on order, but need a warm-up
by "Ed Nelson" <edxnelson@home.com>
- 30) [76714] Help with old call.
by Tom Isgro <k8cz@concentric.net>
- 31) [76715] Used open wire line yesterday...wotta difference
by WB9MII@aol.com
- 32) [76716] Summer Fox Hunt #9 - N4ROA -
by Bruce Rattray <rattray@gpfn.sk.ca>
- 33) [76717] QRP-L Archive CD?
by "Rich Dailey, KA8OKH" <okh.npi@gte.net>
- 34) [76718] TT-2 size?
by "Rich Dailey, KA8OKH" <okh.npi@gte.net>
- 35) [76719] Re: open wire line ...wotta difference
by S LYON <sslyon@worldnet.att.net>
- 36) [76720] QRP in Dusseldorf/Gutersloh, Germany?
by Michael C Boatright <ko4wx@mindspring.com>
- 37) [76721] RE: Antenna Tuner adjustment question
by "Coote, Jay" <JCoote@ci.arcadia.ca.us>
- 38) [76722] Question for antenna gurus...
by "Jim Barrett - KF2DA" <jbarrett@stny.rr.com>
- 39) [76723] NOGA Meeting Notes Aug 6,2000 by AE4GX
by Sam Billingsley <SBillingsley@usaninc.com>
- 40) [76724] Re: Question for antenna gurus...
by Tom Isgro <k8cz@concentric.net>
- 41) [76725] RE: Question for antenna gurus...
by "Coote, Jay" <JCoote@ci.arcadia.ca.us>
- 42) [76726] RE: Antenna Tuner adjustment question

- by "Karl F. Larsen" <k5di@zianet.com>
- 43) [76727] Re: Batteries Indoors
by Tom Randall <trandall@idsi.net>
- 44) [76728] Re: OOPS! NC20 Xtal toasted
by "John J. McDonough" <wb8rcr@arrl.net>
- 45) [76729] 11 oz 20m Vertical
by ARDUJENSKI@aol.com
- 46) [76730] [ANT] Antenna Tuner Adjustment Question
by "James R. Duffey" <jamesd1@flash.net>
- 47) [76731] QRP-L Website: Request for articles
by John Wagner <john@neknetwork.com>
- 48) [76732] Re: True Portable HF
by Randy & Cara Randall <crrandal@seidata.com>
- 49) [76733] Re: Question for antenna gurus...
by "Mike Yetsko" <myetsko@insydesw.com>
- 50) [76734] Questions answered - tn timer
by "Rich Dailey, KA80KH" <okh.npi@gte.net>
- 51) [76735] Re: Antenna Tuner adjustment question
by Russ Dow <n7dw@garlic.com>
- 52) [76736] Re: How to pack mobile antenna
by "Richard McGaver" <mcgaver@execpc.com>
- 53) [76737] FS: MFJ 9020 and 564B paddles
by Jerry Albertin <kg2jff@juno.com>
- 54) [76738] Re: [ANT] Antenna Tuner Adjustment Question
by "George , W5YR" <w5yr@att.net>
- 55) [76739] Delaware Bay Lighthouse Operation W2C
by "John L. Sielke" <n4js@pobox.com>
- 56) [76740] Re: Question for antenna gurus...
by "Steven Weber" <kd1jv@moose.ncia.net>
- 57) [76741] Changing Callsign on qrp-l
by "John L. Sielke" <n4js@pobox.com>
- 58) [76742] PROP Conx. Sun 6AUG
by "Paul Harden, NA5N" <na5n@rt66.com>
- 59) [76743] Little Thunder QRP Club Callsign
by Niels Jensen Kristjansson <nkristja@cadvision.com>
- 60) [76744] Excessive Quoting
by "Manager QRP-L" <manager@astro.cc.lehigh.edu>
- 61) [76745] Of Interest To QRP Folks
by "baltimoremd@baltimoremd.com" <baltimoremd@baltimoremd.com>
- 62) [76746] Re: Antenna Tuner adjustment question
by "Mike Branca" <w3irz@att.net>
- 63) [76747] RE: Antenna Tuner adjustment question
by "Coote, Jay" <JCoote@ci.arcadia.ca.us>
- 64) [76748] ATU signal loss.
by "Robert H. Sorge" <rhsorge@juno.com>
- 65) [76749] FOX- Jim's doing ok here in CO
by "Marshall Emm" <mgemm@mtechnologies.com>
- 66) [76750] Re: ATU signal loss.

- by "Karl F. Larsen" <k5di@zianet.com>
- 67) [76751] Re: [ANT] Antenna Tuner Adjustment Question
by Bob Kellogg <ae4ic@nr.infi.net>
- 68) [76752] Fox: Not Today, I Fear... :-(
by Todd Enders <enders@bolshoi.cc.misu.nodak.edu>
- 69) [76753] WOW!--Pelt at 2034 :-)
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 70) [76754] FOX is busy today
by "Karl F. Larsen" <k5di@zianet.com>
- 71) [76755] FOX is busy today
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 72) [76756] FOX - tough pelt to find
by n5ib@juno.com
- 73) [76757] Re: New Fox killer radio
by Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
- 74) [76758] Need strong glue for electro project
by Jim Hale <kj5tf@yahoo.com>
- 75) [76759] My favorite projects from FAR Circuits
by "George Heron N2APB" <n2apb@erols.com>
- 76) [76760] Re: W7/JR1 in the Bumble Bee contest
by BenNW7DX@aol.com
- 77) [76761] MD crab puts the claw on MN fox
by "Nick Yokanovich" <k3ny@toad.net>
- 78) [76762] CONTEST:QRP ARCI Summer Daze SSB Sprint (SSB) *** QRP CONTEST! ***
by Richard Powell <ripowell@mpna.com>
- 79) [76763] Antenna Tuner Efficiency Studies
by "James R. Duffey" <jamesd1@flash.net>
- 80) [76764] Re: New Fox killer radio
by David Hinerman <dlh1009@ritvax.isc.rit.edu>
- 81) [76765] Indoor 20 Mtr antenna help please
by Richard Brittingham <rbritt@visi.net>
- 82) [76766] Re: CONTEST:QRP ARCI Summer Daze SSB Sprint
by "K7FD-N7SG" <cqdx@teleport.com>
- 83) [76767] Re: FOX is busy today
by John Wagner <john@neknetwork.com>
- 84) [76768] Re: Antenna Tuner adjustment question
by NB6M@aol.com

Date: Sat, 5 Aug 2000 18:44:03 -0500
From: "Walter Dufrain" <walter@inlink.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [76685] Re: Direct Conversion Receivers
Message-ID: <003f01bfff37\$0cf61040\$628a87d1@nexar>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Just wanted to mention that Oak Hills Research used to make a fine little group of monobanders called, Sprint I and later version the Sprint II.

The Sprint I was a little voltage sensitive, but the Sprint II was the winner. 2 watts output, great quite DC receiver, a low noise floor, of course these radios are transceivers with a stable VFO.

72 Walter Dufrain, AG5P.....Wright City, Missouri

Date: Sat, 5 Aug 2000 18:46:39 -0400
From: "Armin Hachmer" <armin@muskoka.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>, "QRP-Canada" <qrp-canada@lists.gpfn.sk.ca>
Subject: [76686] For Sale : 2m HT,2m mobile, HF QRP,butternut minibeam, vertical 40-2m
Message-ID: <002001bffff38\$fb232860\$41afd4c7@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Clearing the decks, got a new tower , need money for a new beam. Please buy something.

1. Mosley TA33 with CDR model TR44 Rotator,control box \$100 (\$60 US) for both.
2. Butternut Butterfly mini-beam 20-15-10 (12 and 17 with tuner) no traps, manual, \$120 (\$80.US)
3. MFJ 1796 Vertical, new in the box, just got it in Dayton (long story) 40-20-15-10-6-2 no traps, no radials. Its a centrefed vertical (dipole) 12' high, needs no guying. \$180 (\$120 US)
4. MFJ 9020 20m CW QRP TCVR, manual, \$100 (\$60 US)
5. MFJ 9420 Adventure Radio. 20m CW and SSB.
Mic, manual, \$200 (\$120 US)
6. Kenwood TH26HT 2m handheld, charger, speaker mic, manual, \$180 (\$120 US)
7. Realistic HTX-202, 2m handheld, charger, speaker mic, extra case for alkaline batteries or nicads, manual, \$100 (\$60 US)

8. Kenwood TM 241A, 2m mobile, bracket, used in the shack, manual, \$180 (\$120 US)

All are in good condition.

Armin Hachmer VE3TEQ
'Life is a contactsport'
armin@muskoka.com
QRP-C # 17 QRP-L # 1702
fpQRP # 52 ARS #591 ARCI #10380

Date: Sat, 5 Aug 2000 20:04:40 -0400
From: "Armin Hachmer" <armin@muskoka.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [76687] Fw: For Sale : 2m HT,2m mobile, HF QRP,butternut minibeam, vertical 40-2m
Message-ID: <003301bfff3a\$c0f30000\$41afd4c7@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Sent: Saturday, August 05, 2000 7:58 PM
Subject: For Sale : 2m HT,2m mobile, HF QRP,butternut minibeam, vertical 40-2m

> Clearing the decks, got a new tower , need money for a new beam. Please buy
> something.
>
> 1. Mosley TA33 with CDR model TR44 Rotator,control box \$100 (\$60 US) for
> both.
>
> 2. Butternut Butterfly mini-beam 20-15-10 (12 and 17 with tuner) no
traps,
> manual, \$120 (\$80.US)
>
> 3. MFJ 1796 Vertical, new in the box, just got it in Dayton (long story)
> 40-20-15-10-6-2 no traps, no radials. Its a centrefed vertical (dipole)
12'

> high, needs no guying. \$180 (\$120 US)
>
> 4. MFJ 9020 20m CW QRP TCVR, manual, \$100 (\$60 US)
>
> 5. MFJ 9420 Adventure Radio. 20m CW and SSB.
> Mic, manual, \$200 (\$120 US)
>
> 6. Kenwood TH26HT 2m handheld, charger, speaker mic, manual, \$180 (\$120 US)
>
> 7. Realistic HTX-202, 2m handheld, charger, speaker mic, extra case for
> alkaline batteries or nicads, manual, \$100 (\$60 US)
>
> 8. Kenwood TM 241A, 2m mobile, bracket, used in the shack, manual, \$180
> (\$120 US)
>
> All are in good condition.
>
> Armin Hachmer VE3TEQ
> 'Life is a contactsport'
> armin@muskoka.com
> QRP-C # 17 QRP-L # 1702
> fpQRP # 52 ARS #591 ARCI #10380
>
>
>
>

Date: Sat, 05 Aug 2000 17:35:27 -0700
From: Jim Lowman <jmLowman@ix.netcom.com>
To: QRP-L@lehigh.edu
Subject: [76688] Ft. Tuthill and other hamfests/swapmeets
Message-ID: <398CB2CF.679CCD54@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

One things that amazes me about the Ft. Tuthill hamfest is the sheer amount of HF gear that is available at the swapmeet; most of which is in great cosmetic condition.

The local swapmeets that I attend frequently seem like a bust, in comparison. Most of what I see for sale is either HTs or computers and related supplies. Now, the newer hams probably don't see anything wrong with this concept, and I intend no disrespect to the swapmeet organizers

or sponsors.

Is it perhaps the fact that Ft. Tuthill is also the AZ state convention that inspires this outpouring of HF equipment for sale, a la Dayton?

Just curious if this is a SoCal phenomenon, or if this happens at many other swapmeets?

Thanks, in advance, for all replies. In deference to the list members, please reply directly and, if anyone is interested the the results, I'll post a summary later.

72 de Jim - AD6CW

Date: Sat, 5 Aug 2000 17:27:13 -0700
From: Bill Walker <windal@azstarnet.com>
To: qrp-1@lehigh.edu
Subject: [76689] QRP in Tucson?
Message-ID: <00080517390501.01072@deneb>
Content-Type: text/plain
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

Hello all!

Could anyone tell me if there is a QRP club in the Tucson Az. area and do the Az. ScQRPions have a web site?

--
Bill Walker - KD7JZB
windal@azstarnet.com
<http://www.azstarnet.com/~windal/>

Date: Sat, 5 Aug 2000 20:48:30 EDT
From: GE1am30092@aol.com
To: windal@azstarnet.com, qrp-1@lehigh.edu
Subject: [76690] Re: QRP in Tucson?
Message-ID: <bc.89d667c.26be0fde@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 8/5/00 5:40:12 PM US Mountain Standard Time, windal@azstarnet.com writes:

<< Could anyone tell me if there is a QRP club in the Tucson Az. area and do the Az. ScQRPions have a web site? >>

I can't answer about the Tucson question but the AZ ScQRPions' site is at <http://www.extremezone.com/~nk7m/>

I'm not aware of a Tucson club but the AZ ScQRPions has at least one member in the Tucson area.

We had a meeting today (and every first Saturday of each month at Luby's in Phoenix off of I-17 and Dunlop. Maybe you can make the drive up or schedule another reason to come to PHX in addition to coming to the meeting!

Cheers,
Gerry Elam, K7LR0
PHX AZ

Date: Sat, 5 Aug 2000 20:46:06 -0400
From: "Armin Hachmer" <armin@muskoka.com>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [76691] the line is busy?
Message-ID: <004601bffff41\$119fb6a0\$41afd4c7@muskoka.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

not getting through, "conference is full" ?

Date: Sat, 5 Aug 2000 18:12:02 -0700 (PDT)
From: Jim Durkin <jimdurkin@yahoo.com>
To: jmlowman@ix.netcom.com, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76692] Re: Ft. Tuthill and other hamfests/swapmeets
Message-ID: <20000806011202.6424.qmail@web312.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

As with most of the other messages that want to save bandwidth, I would like to hear about this.
Is it really necessary to save all this bandwidth? For whom is it being saved. I am too old to do any more saving<G>.

My preference would be to have people respond to the list and I can delete it if it is not of interest

73

Jim kt4a

--- Jim Lowman <jmlowman@ix.netcom.com> wrote:

> One things that amazes me about the Ft. Tuthill
> hamfest is the sheer
> amount of HF gear that is available at the swapmeet;
> most of which is in
> great cosmetic condition.

>

> The local swapmeets that I attend frequently seem
> like a bust, in
> comparison. Most of what I see for sale is either
> HTs or computers and
> related supplies. Now, the newer hams probably
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> AZ state convention
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> Just curious if this is a SoCal phenomenon, or if
> this happens at many
> other swapmeets?

>

> Thanks, in advance, for all replies. In deference
> to the list members,
> please reply directly and, if anyone is interested
> the the results, I'll
> post a summary later.

>

> 72 de Jim - AD6CW

Do You Yahoo!?

Kick off your party with Yahoo! Invites.

<http://invites.yahoo.com/>

Date: Sat, 5 Aug 2000 21:27:44 -0400

From: w2xn@juno.com

To: qrp-1@lehigh.edu
Subject: [76693] Fw: FOX: Big Dawgs Overtaken!
Message-ID: <20000805.213334.-816031.6.w2xn@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

No way will the Dawgs catch the Rats now... Look out, they is powerful with Mac and his infamous attic dipole, Paul with his 70 ft tower and beam, Tom with his beam and Gulf of Mexico effect, Doc who doesn't miss a one, and Pete charging right along with them, them Dawgs is gonna be left in the murky depths of the swamp by the Rats.

Fred W2XN w2xn@arrl.net
Lakeland, FL
ARRL, ARES, Skywarn #POL-007, VE
QRP: AR #233, QRP-L #1728, NJ #197, Zombie #709

=====
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Date: Sat, 5 Aug 2000 14:18:54 -0600
Subject: FOX: Big Dawgs Overtaken!

....but not passed, yet. In hunt 9 the Swapm Ratzes missed a Q, but the Dawgs missed TWO, resulting in a TIED BALLGAME at 40 points each.

Those that are paying attention will recall that the Dawgs had to come from behind to take the lead, and I'm confident we can do it again, despite one Dawg being off in Alaska paying more attention to Grizzlies than to foxes.

.
Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

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<http://dl.www.juno.com/get/tagj>.

Date: Sat, 5 Aug 2000 19:11:19 -0700

From: "Doug Hendricks" <ki6ds@dospalos.org>
To: <qrp-1@lehigh.edu>
Subject: [76694] K2 #621 sold
Message-ID: <042601bfff4b\$9cb06820\$36bdc03f@DougHendricks>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I have sold the K2 that I listed yesterday. I was surprised at the lack of response to my ad. I only had 2 inquiries, one of which was serious. The second wanted to know if I still had it, but did not ever offer to purchase it.

I thought the price was more than fair, as I had paid \$697.35 for the kit plus the options. The rig is in Excellent condition, has no mods and I would give it a 10 on a scale of 1-10.

I am happy with the price that I got for it, \$650 and the buyer paid the shipping and insurance. Have had a couple of messages asking if I was getting out of QRP. Nope, just realigning the shack, and making room for more equipment that I have my eye on.

72, Doug, KI6DS

Date: Sat, 5 Aug 2000 21:21:54 -0500
From: "Craig B. Johnson" <cbjohns@mn.mediaone.net>
To: <qrp-1@lehigh.edu>
Subject: [76695] Antenna Tuner adjustment question
Message-ID: <001b01bfff4d\$2f500040\$6501a8c0@cbjp2>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I was reading the "Kurt Sterba" article about antenna tuners in the August 2000 issue of WorldRadio. I know that Kurt never makes a mistake (!!) but something there seems wrong to me. Kurt is describing how to adjust a tuner for minimum loss and maximum efficiency. In his instructions, he says:

"Here is how to get it: Start with both of the capacitors set at maximum capacitance. Next adjust the "antenna" or "load" capacitor and the coil to get minimum SWR. If this minimum is not 1:1 then reduce the capacitance of the "transmitter" or "input"

capacitor and try again.

Keep doing this until you get 1:1 SWR with the "input" capacitor as large as possible. Following this procedure you may cut your losses in half."

My problem with this statement is that I always thought you should attempt to maximize the "output" (antenna) capacitor, rather than maximizing the "input" (transmitter) capacitor.

I just attempted to follow his procedure, and it seems like a real pain. I guess it may, in fact, result in maximum capacitance on the output capacitor. I just don't like to adjust the output capacitor and coil simultaneously. My tuner has a tapped inductor rather than a roller inductor, so I don't want to switch it "hot". I would rather set the coil tap, start transmitting, and adjust the two capacitors for a 1:1 SWR. I stop transmitting before I change the coil tap again. Since there are several coil settings that result in 1:1 SWR, I always try to use the coil setting that results in the "output" capacitor being as high as possible. The input capacitor is set to whatever it needs to be to get the 1:1 SWR.

Am I reading this wrong?

73,

- Craig, AA0ZZ

Date: Sat, 05 Aug 2000 22:34:28 -0400
From: Pete Burbank <plburbank@kih.net>
To: <qrp-1@lehigh.EDU>
Subject: [76696] Fox: Dawgs and Ratz
Message-ID: <3.0.32.20000805223419.00a25fdc@kih.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

This is really fun and quite frankly I don't care who wins. The main thing IMHO is that the troops get out in the yard and try various antennas and then build new rigs and get on the airwaves and refine operating skills. I hope some other teams do well soon and the Propagation Fairy will smile on all of us.:-) 73 to all
Pete NV4V...KY

Date: Sat, 5 Aug 2000 22:43:41 EDT
From: W0rw@aol.com
To: qrp-1@lehigh.edu
Subject: [76697] QRP LF at 480 kHz
Message-ID: <3f.88cf8ee.26be2add@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Please listen for low power CW Beacon on 480 kHz.
Beacon is sending 'RW' in CW from Colorado.
If you are out of state listen after dark or very early in the morning.
All reports appreciated, Long Wave QSL card sent to all who report.
Please let me know your receiver and antenna type/length.

72 Paul w0rw@aol.com

Date: Sat, 5 Aug 2000 22:47:33 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <w4pj@bellsouth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, <nk7m@extremezone.com>
Subject: [76698] Re: BUBBA 2000
Message-ID: <006701bfff50\$c9eccc00\$0600a8c0@dad>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I know, it's not the heat, it's the humidity.

Sounds like something a lobster would say...

Mike

----- Original Message -----

From: Scott Hotchkiss <w4pj@bellsouth.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Saturday, August 05, 2000 6:09 PM
Subject: Re: BUBBA 2000

> ----- Original Message -----

> From: "Bob Hightower" <nk7m@extremezone.com>
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> Sent: Saturday, August 05, 2000 5:32 PM

> Subject: BUBBA 2000
>
>
> > CONTEST ANNOUNCEMENT....BUBBA 2000 will be held on Saturday, August 26,
> 2000
> > from 1800Z-2200Z.
> >
> > fact that we here in the Southwest are a bit more used to extreme
> > temperatures,
>
> Yeah, but it's a D R Y H E A T .
> de (Scott) W4PJ Ft. Lauderdale, FL (93 in the shade 88% Humidity)
>
>

Date: Sun, 06 Aug 2000 03:06:46 +0000 (GMT)
From: "Geoff QRP-L mailing list" <geoffqrp@wormhole2.com>
To: "Jeff Poulin " <jpoulin@erols.com>
Cc: "Low Power Amateur Radio Discussion " <qrp-l@Lehigh.EDU>
Subject: [76699] Re: Hamstick radials
Message-ID: <96553120615391-05230615391geoffqrp@wormhole2.com>

Why not get another Hamstick and make them into a dipole. A little mast and
guise / tripod. I personally use Hamsticks in the center of my van roof and they
work well. This may be a better solution unless you have to place the antennas
inside. I just carry an extra 100' roll of RG8 with me.

On Tue, 1 Aug 2000 Jeff Poulin wrote:

> Gang: I do a lot of traffic nets and HF ARES nets that use 75 meters.
> I recently got a 75 meter Hamstick as an emergency backup antenna,
> attached two quarter wavelength radials and it works fine, almost as
> good as the dipole (which might say something about my dipole).
> Anyway, I would like to use a 40 meter version in the same mount. Can
> I simply screw it onto the mount after I adjust it as needed, and use
> the same radials or do I need to attach different length radials for
> the different band? I'm trying to do this without a tuner to keep the
> emergency gear as simple, light and portable as possible. Your help
> and knowledge will be appreciated.
>
> Please reply to me personally so I don't casue a clog on the list.
>
> Many thanks.
>
> Jeff KV4AP QRP-L # 743

> Manassas, VA

>

>

Geoffrey E. Sachse
Lyndonville VT
geoff@wormhole2.com
kb1dsq@arrl.net
www.wormhole2.com
KB1DSQ

Date: Sat, 05 Aug 2000 20:44:16 -0700
From: Bob Hightower <nk7m@extremezone.com>
To: qrp-1@lehigh.edu, eleccraft@qth.net
Subject: [76700] BUBBA 2000
Message-ID: <200008060338.UAA19501@enterprise.extremezone.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Looks like the URL for the rules got messed up in the original message. Should be:

<<<http://www.extremezone.com/~nk7m/bubba00.htm>><http://www.extremezone.com/~nk7m/bubba00.htm>>

Bob Hightower NK7M
Chandler, AZ
SOC #20
K2 #157/255

<http://www.extremezone.com/~nk7m>

Date: Sun, 6 Aug 2000 00:24:01 -0000
From: "Christian Castillo" <chcastillo@planetarymotion.net>
To: <qrp-1@Lehigh.EDU>

Subject: [76701] Renewable energy applications to QRP transceiver.
Message-ID: <NDBBJNGFBLBMEKLAGMDIIEEOCBAA.chcastillo@planetarium.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello. Which is the photovoltaic module specifications to work well with the
SGC SG 2020 and other QRP HF transceivers ?

Also I'm thinking to design a miniature wind turbine. Please e-mail me with
suggestions to build it.

73 from Venezuela.

Christian Castillo
chcastillo@planetarium.net

Date: Sat, 05 Aug 2000 21:57:56 -0700
From: Jim/Julia <w7ls@blarg.net>
To: crrandal@seidata.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76702] Re: True Portable HF
Message-ID: <398CF054.B952CF39@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

No production, as yet. Rumored price is \$1995. That could be Canadian, though.
Jim W7LS

Randy & Cara Randall wrote:

> Anyone have the pricing on this marvel?
>
> Randy.
>
> ARDUJENSKI@aol.com wrote:
>
> > With all the rigs available, they seem to share the same problem in that the
> > enclosure or case is not travel and field friendly. Sure they all have bells
> > and whistles, low battery drain and lightweight but get a little dirt and
> > moisture or bump them a bit and then what?
> >
> > It was refreshing to see a rig that is really designed to go on the road

> > (thanks to Jim W7LS for passing on this site):
> > <http://www.silk.net/paracomm>
> >
> > ENJOY....Alan KB7MBI
>
> --
>
> "No one gives an oink about prom night or football, 'cause just gettin' home
> from school safe is a gamble and a blessing..."--Billion Dollar Babies, Alice
> Cooper

Date: Sat, 05 Aug 2000 22:02:47 -0700
From: Jim/Julia <w7ls@blarg.net>
To: w9zm@yahoo.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76703] Re: How to pack mobile antenna
Message-ID: <398CF176.E48A41C9@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Fishing rod case from a sporting goods store. Jim, W7LS

Duane Alles wrote:

> Hello All,
>
> I'm going to fly to the East Coast and want to take my
> mobile rig. I use Valor Pro Am antenna's that break in
> half. (ham stick look alike) I'll need a hard case of
> some kind. Any Ideas??
>
> Thanks in advance
>
> 72/73
> Duane, W9ZM
>
> -----
> Do You Yahoo!?
> Kick off your party with Yahoo! Invites.
> <http://invites.yahoo.com/>

Date: Sat, 5 Aug 2000 21:57:03 -0700
From: "Doug Hendricks" <ki6ds@dospalos.org>
To: <qrp-1@lehigh.edu>
Cc: <WA6GER@aol.com>
Subject: [76704] Ft. Tuthill Report and other stuff (long)
Message-ID: <000f01bfff62\$c3cc7ea0\$24bdc03f@DougHendricks>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys this was my fifth Ft. Tuthill in a row, and by far the most fun. Yes, I said that last year, but I really do mean it. The Arizona ScQRPions do a fantastic job of putting on a fun weekend. It is so neat that my wife, JoAnne, insists that we attend, and she is not fond of ham radio. Yet she likes Ft. Tuthill because it is not just ham radio, but includes family activities and fun also.

Everyone involved did a fantastic job. Excellent speakers, I really enjoyed Dan Tayloe a lot. He floored me when he showed me the new 40 meter "Mini-Stinger" using the Tayloe mixer. I first saw the radio 2 years ago at Pacificon, and have been supporting the development of the rig with NorCal R&D funds since that time. But the project grew into a 9 band rig that was far too complex for NorCal. Dan started redesigning a 40 meter only version so that NorCal could have a kit. Wow, what a radio it is. We talked, and have decided that we will kit it as a full kit, including case, knobs and controls. The Mini-Stinger will also have a BLT tuner included, as well as a holder for 5 AA batteries. Dan is going to change some of the IC's to low current consumption versions, and the rig will run about 10 mA on receive, which I believe will be the lowest of anything on the market. Power output will vary from 0 to 3 watts, it uses a 2SC1969 as a final, and it will run on anything from 5 to 18 volts. It should be a backpackers delight. Yes, the rig will also have a TiCK keyer included. So all that you will have to do is bring headphones and a set of paddles and you are ready to get on the air.

The rig will have the following features:

1. Frequency Range of 7.030 to 7.045 (simple mod to expand it.)
2. Transmit Power of 0 - 3 W adjustable
3. Current Drain: 10 mA receive, 450 mA @ 3 W output (~ 65% Efficiency)
4. Receiver Sensitivity: Better than -135 dbm
5. USB receive with oppo0site sideband suppression of -45 to -50 db
6. Audio selectivity: 3 db BW, 350 Hz; - 3 db at 313 and 666 Hz; -40 db at 60 and 1250 Hz
7. RIT
8. Audio output is suitable for driving headphones
9. Design features an image rejection DC receiver based on the Tayloe mixer.

10. Uses 5 analog and 5 digital IC's.
11. Smooth, thump free keying with fast QSK
12. Receiver does not suffer from Short Wave broadcast front end overloading
13. Combination of an analog VFO for main tuning and VXO for RIT offset contributes to both a very low receiver drift and a consistent RIT offset across the band.
14. The design uses the simple and proven TiCK chip as both a keyer and a sidetone.
15. The sidetone has been filtered to minimize side tone induced "thump"
16. Most inductors are molded chokes, only 3 toroids to wind.
17. Easy alignment: There are two tuned circuits (VFO and 28 MHz filter) to set, and three simple audio phasing adjustments (tune for maximum LSB signal cancellation).
18. No AGC

The rig will be less than \$100 as a full kit. We will make it a hybrid of surface mount as well as through hole parts where necessary. I would say that it will be about 90% surface mount, using 1206 parts.

Dan has a working prototype. The next step will be to add the low current chips, the components to make it run on a wide voltage range, and then we will layout the board. After we layout the board, we'll build and thoroughly test prototypes (Yes we already have the beta testers, thanks). Hopefully, we will have a prototype kit or several kits to show you at Pacificon, where Dan will be one of the featured speakers.

This is not the 10 meter rig that we announced last spring. That kit is still being developed. The designer has been way too busy at work this summer to spend the time needed to finish it. It is still being developed and will be ready for next spring. But, for all of those who are anxious to build another surface mount rig, this time a real radio, the NorCal Mini Stinger designed by Dan Tayloe should fill the bill.

I would ask that you not deluge Dan with email. His time is finite to work on radios, and if he gets buried in email, he can't finish the design. Please be patient, the design will be here soon.

There will be rigs for other bands developed later.

Please do not send money or order a kit until we announce that it is time to do so.

Back to Ft. Tuthill. One of the non radio highlights for me was the opportunity to play guitar with Mike Connor, Bob Okas, John Humphrey, Clayton Cadmus, Dave Benson and John Moriarity. The seven of us had a blast, and we did attract a small crowd that had fun. Lots of kids in the group, and they seemed to enjoy the "oldtime music". I learned several new songs, but have to say that my favorite was the Greatful Dead version of

"Ripple".

The sight of seeing several young hams building Tuna Tin II's was fantastic. The guys did a great job on this activity, and gave away 50 TTII kits. Great PR move by the ScQRPions.

The building contest was fun and hard to judge. JayBob Bromley and I did the judging, and there were several great entries, my personal favorite was Norm Melick's SST with a VFO in it. Real ingenuity. He built a Dave Benson VFO from a SWL40+ into a SST using Manhattan Style construction. Norm is going to write it up for QRPP. The Benson VFO is renowned for its stability, and it makes the SST into a real radio.

I want to say a special thank you to Bob and Bertie Hightower, Brian Kassel and JoAnna Jones, Roger and Leslie Hightower, JayBob Bromley, Jim and Ginger Duffey, and Dave Yarnes. You were very kind to us and we appreciated your hospitality.

Sunday, JayBob and I drove over to Prescott to visit Chuck Adam's house. Beautiful home, and Phyllis did a magnificent job decorating it. Chuck's radio room is on the second floor. His feedline might be the shortest and most efficient in America. His Antenna is a V Beam that starts on the wall of his house, right outside his shack. Chuck feeds it with about 4 feet of ladder line. Yes, 4 feet. Chuck looks good and says he is feeling fine. It was good to see him again. Phyllis also delighted me by serving me some of her famous Chocolate Desert to Die for.

Special thanks to Vern Wright for donating one of his PW-1 antennas to the prize drawing. I won it!! Wow am I on a roll. Major prize at Dayton, major prize at Ft. Tuthill! Vern is one of the good guys in ham radio, he donates to every major qrp event, and has a great product.

The one thing that I forgot to get at Ft. Tuthill was one of the Noise Generator kits being sold by the ScQRPions. Just slipped my mind. But I am firing off a check to Bob Hightower Monday morning and correcting it. Think of it guys, we are able to buy neat little test equipment kits for \$10 What a steal. First the VE3DNL Marker Generator from the Ft. Smith QRP Club, and now the NOSS Noise generator from the Arizona ScQRPions. If you don't have both of these, get one. You need them if you are going to do any building at all. Both are tremendous bargains, and both are available right now.

JoAnne and I got home late Monday night after 8 weeks on the road traveling in our Airstream. We saw lots of our friends, yet it was good to sleep in our regular bed. I have spent this week kitting BLT's, mailing crystal orders and Back Issues of QRPP that came in while I was gone. Also sent out several parts for SMK-1's that were needed. Just about caught up. All BLT orders will be mailed Tuesday. Thanks for your patience.

Let me end by saying that the very best QRP event in my opinion is Ft. Tuthill. I mean that. It is better than Pacificon, and I put that one on. Make plans to attend it next year. I'll be the guy with the big grin on his face having fun. 72, Doug, KI6DS

Date: Sun, 6 Aug 2000 01:42:21 EDT
From: DYARNES@aol.com
To: qrp-l@lehigh.edu
Subject: [76705] Intermittant Delivery Through AOL
Message-ID: <a5.96fbd14.26be54bd@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi All,

I know this has come up before, but can't remember if there was an answer given. I am on AOL, and I definitely and not getting all the messages that are posted to the group on AOL. For several days I have been comparing my AOL processed QRP-l posts with the actual archives listing for QRP-L. Looks like about a third or more never makes it to me. Did anyone every figure this problem out?

Dave W7AQK

Date: Sat, 5 Aug 2000 23:28:16 -0700
From: "K7FD-N7SG" <cqdx@teleport.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [76706] NAQP QRP w/ Norcal NC40a
Message-ID: <002901bfff6f\$823928a0\$aa231ad8@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Only had an hour to play, but the NC40a made a good showing...18 Q's and 10 states all S&P, best DX AR, TN, and MN. Antenna: single full-size forty meter vertical rectangular loop about 12 feet off the ground.

72 John K7FD, <http://www.teleport.com/~cqdx/qrpclub.htm>

Date: Sun, 6 Aug 2000 01:04:57 -0600
From: "Rod, N0RC" <n0rc@qsl.net>
To: "qrp-1" <qrp-1@Lehigh.EDU>
Subject: [76707] OOPS! NC20 Xtal toasted
Message-ID: <035b01bfff74\$a4b6dd00\$068611d8@compaq>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Folks:

I need a new 100kHz XTAL (X8) for my NC20, I think. But where can I get one? Red Hot is closed for the summer. Anybody know where the parts came from so that I can order one? Maybe have an extra they are willing to sell?

I was getting caught up on some long overdue mods, and the AFA came up non-functional. One mod I did put a 100k ohm resistor in series with X8 to limit XTAL current. A little to much soldering iron heat on/near the xtal no doubt, darn. All the AFA DC voltages look good so it must be the XTAL. Don't have a scope anymore to check it.

OTH: The mods I did really made the radio even nicer. I did the RX audio mod to lower the frequency to ~600hz, nice. Also took off two turns on L6 & L7 seems to have upped the power out a nudge, and is supposed to clean up spurs, and increase RX sens (no way to test). And, I reworked the resistors in the VFO to limit tuning range to 70kHz (was 80) and limit RIT to +/- 1.25kHz; R9=180k, R5=560k respectively.

FWIW: The NC20 is one rig that has stood the test of time I enjoy using it as much today as when I first completed it. Did a nice job in the QRP-ARCI HB sprint too.

72/3 Rod, N0RC -- Fort Collins, CO

Date: Sun, 06 Aug 2000 01:01:59 -0700
From: Phil Wheeler <w7ox@earthlink.net>
To: n0rc@qsl.net

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76708] Re: 00PS! NC20 Xtal toasted
Message-ID: <398D1B77.BE133472@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"Rod, N0RC" wrote:

>
> Folks:
>
> I need a new 100kHz XTAL (X8) for my NC20, I think. But where can I
> get one? Red Hot is closed for the summer. Anybody know where the
> parts came from so that I can order one? Maybe have an extra they are
> willing to sell?
>

I believe there may be a manual at the RHR web site, if it's up. that
may ID the source and catalog number.

Phil

Date: Sun, 6 Aug 2000 09:04:37 +0100
From: Rick Arzadon <n8xi@juno.com>
To: cbjohns@mn.mediaone.net
Cc: qrp-1@Lehigh.EDU
Subject: [76709] Re: Antenna Tuner adjustment question
Message-ID: <20000806.090827.-160019.0.n8xi@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Gang,
I have found that the best way, for me, is to leave the Rig in Receive
and
tune for the best noise or signal. I usually end up pretty close with the
Caps and Inductor.
Then, with low drive, peak your controls for the best match and you
should be all set.
And, finally increase drive until you get a blue Flame. White hot is a
no-no.

72, Rick- N8XI

=====

On Sat, 5 Aug 2000 21:21:54 -0500 "Craig B. Johnson"

<cbjohns@mn.mediaone.net> writes:

> I was reading the "Kurt Sterba" article about antenna tuners in
> the August 2000 issue of WorldRadio. I know that Kurt
> never makes a mistake (!!) but something there seems wrong to
> me.
> "Here is how to get it: Start with both of the capacitors set at
> maximum capacitance. Next adjust the "antenna" or "load"
> capacitor and the coil to get minimum SWR. If this minimum is
> not 1:1 then reduce the capacitance of the "transmitter" or "input"
> capacitor and try again.
> Keep doing this until you get 1:1 SWR with the "input" capacitor as
> large

>
> I just attempted to follow his procedure, and it seems like a real
> pain.
> simultaneously. My tuner has a tapped inductor rather than a roller
> inductor, so I don't want to switch it "hot". I would rather set the
> coil tap,
> start transmitting, and adjust the two capacitors for a 1:1 SWR. I
> stop transmitting before I change the coil tap again.

YOU'RE PAYING TOO MUCH FOR THE INTERNET!

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<http://dl.www.juno.com/get/tagj>.

Date: Sun, 6 Aug 2000 06:44:03 -0500 (CDT)

From: ac5ez@webtv.net (K1zw)

To: qrp-1@lehigh.edu

Subject: [76710] trade

Message-ID: <16951-398D4F83-4302@storefull-112.iap.bryant.webtv.net>

Content-Disposition: Inline

Content-Type: Text/Plain; Charset=US-ASCII

Content-Transfer-Encoding: 7Bit

MIME-Version: 1.0 (WebTV)

I have a mfj 9015 and would like to trade it for a mfj 9030. Its time
to try a new band.

k1zw

Date: Sun, 6 Aug 2000 06:23:29 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [76711] True Portable HF
Message-ID: <Pine.LNX.4.10.10008060615340.732-1000000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

If your 7,000 miles from Las Cruces, NM in Africa and want to talk back to Las Cruces, what do you take? You take my Kenwood TS-50, and a 20 and 15 meter dipole, fed with tiny coax. Make a schedule with Hams that have beams and force a path.

We had many QSO's that were mostly noise. A few were good enough for a phone patch that was wierd and another story.

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Sun, 6 Aug 2000 09:09:11 -0400
From: "Bruce & Tosh Hopkins" <makai@grouper.batelnet.bs>
To: <w9zm@yahoo.com>
Cc: <qrp-l@Lehigh.EDU>
Subject: [76712] Antenna Case...
Message-ID: <000f01bffa7\$aa755220\$d6ed48d8@computer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Duane...

One thing that has worked well for me for things like antennas, sport kites, fishing poles, etc. is your garden variety white PVC pipe and fittings... It is cheap, readily available, and can be custom made for your needed length and diameter... If it is going into baggage, I use schedule 40 pipe which is heavy but pretty much baggage handler proof... I glue an end cap on one end, and glue a clean out fitting on the other end... I make them a bit longer than needed and put a foam rubber plug in each end for protection... The screw in cap for the clean out can have a hole drilled at

an angle through the fitting and the cap and then a lock can be inserted for security... If you want it as a carry on item, the white sewer drain pipe is adequate and much lighter... Not as strong but since it stays in your possession, you know who to blame if it gets broken... A length of 1" nylon strap formed into a handle like on a duffle bag at the balance point makes it easy to carry... An indelible marker can be used to put your name address and phone number permanently on the pipe...

Hope that this is of some help... I have made many of these cases for my fragile stunt kites and carried them between Alaska, Hawaii, and the Bahamas and have yet to have one damaged... Take care and have fun on your trip...

72 - Bruce - KL7H/C6A

<http://www.qsl.net/k17h>

Date: Sun, 6 Aug 2000 09:40:59 -0400
From: "Ed Nelson" <edxnelson@home.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [76713] K1 on order, but need a warm-up
Message-ID: <044201bfffab\$f45d29e0\$2c490b18@prntn1.nj.home.com>

Hi All

I have a K-1 on order, but since I haven't done any building since the DX35 kit, I figure I need a warm-up. So; if anyone has an un-built NC-20 or similar rig (Red Hot is closed for the summer) that they would like to get rid of at a ridiculously low price; I could be sweet talked into taking it off your hands.

Ed W4EN

Date: Sun, 06 Aug 2000 09:45:57 -0400
From: Tom Isgro <k8cz@concentric.net>
To: Flying Pigs <fpqrp@egroups.com>, 10-10 International Discussion List <tenten-l@Lehigh.EDU>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76714] Help with old call.
Message-ID: <398D6C15.6DACE50B@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

I just received a package of about 15 QSL cards from the Bureau yesterday. Unfortunately, they belong to the ham who had the call K8CZ prior to me. All are in the date range of 1988 through 1995.

The call does not exist in QRZ's 1993 database. Can anyone with older callbooks help me find the owner of K8CZ prior to 1998. I would like to forward his cards if possible.

--

72, 73 oo's

Tom K8CZ Hamilton, OH

FPqrp #-41, QRP-1 945, FISTS 2360, NORCAL 2113, ARCI 9606,
10-10 68364, SCI 1479, ARS 203, ARRL

Date: Sun, 6 Aug 2000 09:45:12 EDT
From: WB9MII@aol.com
To: qrp-1@lehigh.edu
Subject: [76715] Used open wire line yesterday...wotta difference
Message-ID: <7d.8ac480a.26bec5e8@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Howdy Gang,

Yesterday just to try it I jury rigged up some open wire line outa some no. 16 speaker wire and homebrew spreaders. hooked it to a 56 ft CF Zepp which runs around the ceiling of "the shack" (which is a condo type place bedroom). that hooked up via my old ATU to my 9020 at 4 watts was working 6's and 7's as early as 2330 GMT...which mebbe no big deal but has never happened here before. Anyhow...my jury rig feedline may not look like much but it sure works.

72

Greg WB9MII

QRP ARCI 9719

Amateur Radio Post 380 - American Legion

Date: Sun, 6 Aug 2000 07:55:18 -0600 (CST)
From: Bruce Rattray <rattray@gpfn.sk.ca>
To: QRP-Canada <qrp-canada@lists.gpfn.sk.ca>, Low Power Group <qrp-1@LeHigh.EDU>
Subject: [76716] Summer Fox Hunt #9 - N4ROA -
Message-ID: <Pine.LNX.3.95.1000806074833.25676A-1000000@neale.gpfn.sk.ca>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

....a kind reminder for all foxii to send me a copy of your final log so I can tally the Team competition....thank you.....

.....and look at the SWAMP RATS & the BIG DAWGS!.....neck & neck eh!!!!

.....looks like the RAIDERS OF THE LOST RF and the FLYING PIGS are heating things up as well!!

- TEAM COMPETITION -

(1) - SWAMP RATS: Pts=40

- K0EVZ - Doc <-
- NV4V - Pete
- AF4PS - Mac <-
- AJ4Y - Paul<-
- N1TP - Tom <-

(2) - QRP CHEESEHEADS: Pts=7

- N9AW - Jerry <-
- NK9G - Rick
- AE9K - Brian
- WA9TZE- Jim

(3) - RAIDERS OF THE LOST RF: Pts=16

- NA6E - Mary
- VE3FAL - Fred
- VA6RF - Earl <-
- VE5RC - Bruce <-
- VE6JAZ - Robert

(4) - THE FLYING PIGS: Pts=17

- KB9BVN - Brian
- N8IE - Dan
- W8DIZ - Diz
- WB6JBM - Rick
- AC7CF - Andrew

(5) - GANDALF the GREY: everyone please listen for Wayne & report on QRP-L if you hear him.....please stand by if you hear him trying to bag the fox!

- G0JJQ - Wayne

- (6) - BIG DAWGS: Pts=40
- N1FN - Marshall <-
- N5TW - Tom
- WJ1R - Larry <-
- NW7DX - Ben
- N6WG - Bob <-

....godd luck to everyone!

...72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272
A-1 Operator Club - 10/10# 944 - SOC #11 & #12 - Whiner#10 -
"QRP! How sweet it is!" "I am da man wit "DAH" paddle!"

Date: Sun, 06 Aug 2000 14:13:28 -0400
From: "Rich Dailey, KA80KH" <okh.npi@gte.net>
To: qrp-l@lehigh.edu
Subject: [76717] QRP-L Archive CD?
Message-ID: <3.0.16.20000806141245.2d7f5b0a@mail.gte.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Sorry for all the questions, but still sorting thru *months*
of QRP-L digests, getting caught up. I see things are a lil
different, but the same. Still a great list.

Have any QRP-L archive CD's been compiled since
version 2.0.1, May 15, 1999?

tu de rich

Rich Dailey, KA80KH <okh.npi@gte.net>
The KB4NPI/KA80KH Web <<http://home1.gte.net/web22jfw/index.htm>>
This is a self-referential sentence.

Date: Sun, 06 Aug 2000 14:13:26 -0400
From: "Rich Dailey, KA8OKH" <okh.npi@gte.net>
To: qrp-1@lehigh.edu
Subject: [76718] TT-2 size?
Message-ID: <3.0.16.20000806140952.3fd70a9e@mail.gte.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

What size tin is required for the TT-2?

tu de rich

Rich Dailey, KA8OKH <okh.npi@gte.net>
The KB4NPI/KA8OKH Web <<http://home1.gte.net/web22jfw/index.htm>>
This is a self-referential sentence.

Date: Sun, 06 Aug 2000 10:32:52 -0400
From: S LYON <sslyon@worldnet.att.net>
To: WB9MII@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76719] Re: open wire line ...wotta difference
Message-ID: <398D7714.54BC44E@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Glad to hear of your good experience with open wire feeders, Greg. I'm quite biased in favor myself, and when the next issue of the NJQRP Home Brewer comes out you'll see an article describing a very easy way to make a bunch in a hurry.

In the mean time, Home Depot, Lowes, etc. sell a 500' roll of bare, or THHN #18 for about \$13 that you can use for feeders and antennas. Can't beat the price/performance!

73

=S=

WB9MII@aol.com wrote:

>

> Howdy Gang,

> Yesterday just to try it I jury rigged up some open wire line outa some no.

> 16 speaker wire and homebrew spreaders. hooked it to a 56 ft CF Zepp which

> runs around the ceiling of "the shack" (which is a condo type place bedroom).

> that hooked up via my old ATU to my 9020 at 4 watts was working 6's and 7's
> as early as 2330 GMT...which mebbe no big deal but has never happened here
> before. Anyhow...my jury rig feedline may not look like much but it sure
> works.
> 72
> Greg WB9MII
> QRP ARCI 9719
> Amateur Radio Post 380 - American Legion

--

'Seab' Lyon - AA1MY
Beacon NY USA FN-31
QRP-L 574 ARCI 9253

Date: Sun, 06 Aug 2000 10:42:43 -0400
From: Michael C Boatright <ko4wx@mindspring.com>
To: QRP-L <qrp-l@Lehigh.EDU>, NOGA QRP Club <nogaqrp@qth.net>
Subject: [76720] QRP in Dusseldorf/Gutersloh, Germany?
Message-ID: <398D7963.2D43609A@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Headed back to Germany later this month. Staying primarily in
Gutersloh, and Dusseldorf over the weekend. Any QRP'ers in the area?
Would love to try and hook up while I'm there. Will be taking my
DSW-20. QRV info via NOGA QRP reflector (nogaqrp@qth.net)...

72 de Mike, K04WX

--

Mike Boatright, K04WX
Assistant Section Emergency Coordinator,
GA Section Amateur Radio Emergency Service

A rock pile ceases to be a rock pile the moment a single man
contemplates it, bearing within him the image of a cathedral.
Antoine de Saint-Exupery

Date: Sun, 6 Aug 2000 07:44:13 -0700
From: "Coote, Jay" <JCoote@ci.arcadia.ca.us>

To: "'cbjohns@mn.mediaone.net'" <cbjohns@mn.mediaone.net>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76721] RE: Antenna Tuner adjustment question
Message-ID: <131CE266CAD0D211B3550008C7C9A2D51CBCBC@arcadia-pd1.arcadiapd.com>
MIME-Version: 1.0
Content-Type: text/plain

Craig and the List;

If you have a tuner with a tapped coil and switch you might try rough-tuning by setting the caps at fully meshed on 160-80-40 and maybe half meshed on 30-20-17-15-12-10. While receiving noise or a station, switch the coil first and adjust the caps for maximum noise or signal in the receiver. This adjustment is very rough.

The next step would be to apply a little power (QRL?) and adjust for a low SWR on each band or sub-band. With tapped-inductor tuners there may be several settings which give an acceptable SWR. Go with the setting which provides the strongest signal at the other end. This will probably be the high capacitance setting as suggested in the Sterba article.

Disregard any old tuner lore about choosing a tuner setting which provides the best filtering or harmonic attenuation. The filtering components in the radio are supposed to do this and I believe the T-tuner is a high-pass filter in "some" configurations. If you are worried about harmonics or BCI, use a filter between the tuner and radio, it's 1/4 the cost of a tuner and more reliable.

If you are using a tapped-inductor tuner for a permanent antenna, make up a card or print a label which shows the tuner settings for each sub-band. If you use the same antenna and tuner, but in different sites, you will find that the settings will change and the cheat card will only help with rough settings.

72
Jay
W6CJ

-----Original Message-----

From: Craig B. Johnson [mailto:cbjohns@mn.mediaone.net]
Sent: Saturday, August 05, 2000 7:22 PM
To: Low Power Amateur Radio Discussion
Subject: Antenna Tuner adjustment question

I was reading the "Kurt Sterba" article about antenna tuners in

the August 2000 issue of WorldRadio. I know that Kurt never makes a mistake (!!) but something there seems wrong to me. Kurt is describing how to adjust a tuner for minimum loss and maximum efficiency. In his instructions, he says:

"Here is how to get it: Start with both of the capacitors set at maximum capacitance. Next adjust the "antenna" or "load" capacitor and the coil to get minimum SWR. If this minimum is not 1:1 then reduce the capacitance of the "transmitter" or "input" capacitor and try again. Keep doing this until you get 1:1 SWR with the "input" capacitor as large as possible. Following this procedure you may cut your losses in half."

My problem with this statement is that I always thought you should attempt to maximize the "output" (antenna) capacitor, rather than maximizing the "input" (transmitter) capacitor.

I just attempted to follow his procedure, and it seems like a real pain.

I guess it may, in fact, result in maximum capacitance on the output capacitor. I just don't like to adjust the output capacitor and coil simultaneously. My tuner has a tapped inductor rather than a roller inductor, so I don't want to switch it "hot". I would rather set the coil tap, start transmitting, and adjust the two capacitors for a 1:1 SWR. I stop transmitting before I change the coil tap again. Since there are several coil settings that result in 1:1 SWR, I always try to use the coil setting that results in the "output" capacitor being as high as possible. The input capacitor is set to whatever it needs to be to get the 1:1 SWR.

Am I reading this wrong?

73,
- Craig, AA0ZZ

Date: Sun, 6 Aug 2000 10:56:37 -0400
From: "Jim Barrett - KF2DA" <jbarrett@stny.rr.com>
To: <qrp-1@lehigh.edu>
Subject: [76722] Question for antenna gurus...
Message-ID: <001f01bffffb6\$858cef40\$eb315e18@stny.rr.com>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings

After many years of living in an apartment, and having to make do with inefficient indoor and "hidden" HF antenna solutions, I have finally become a homeowner. Now I can finally get my "skyhook" outside where it belongs!

My only problem is that my lot isn't terribly large - it's deep enough, but not very wide. I have erected a tripod and mast at the peak of the (2nd story) roof. I just completed construction of a multi-band dipole (70-foot legs), fed with ladder line.

The feed point is about 40 feet above ground, with the ends sloping down to anchors about 10 feet up. The problem is that the apex angle of the "V" is very narrow - probably only 10 degrees. The terminating supports are only 25 feet apart. As a result, the two legs of the dipole are almost parallel. The layout of the lot prevents doing it any other way.

I haven't had a chance to try it on air yet. It's raining quite heavily today, and I still have to get the feedline run into the house. I'm curious as to what effect such a "closed" V may have on antenna efficiency and radiation pattern.

There is a possibility that I may be able to negotiate with a neighbor to anchor one of the legs to a tree on his property. That would allow me to open the apex angle up to about 50 degrees. But, the neighbor in question is out of town for the next two weeks - and I'm operating on the assumption that I will not be able to do this...

My rig is a K2, and I had excellent results at my old place using only a 45-foot end-fed # 28 wire, up just 15 feet above ground, so I have to believe that my new setup will be better than that.

Any insights would be appreciated.

72 es 73

Jim Barrett - KF2DA

Date: Sun, 6 Aug 2000 11:07:55 -0400
From: Sam Billingsley <SBillingsley@usaninc.com>

To: "_AAAA_NOGA_onlist (E-mail)" <nogaqrp@qth.net>, "_Mike K04WX Boatright (E-mail)" <ko4wx@mindspring.com>, "klqrp_submit (E-mail)" <klqrp@waterw.com>, "Qrpl_Submit (E-mail)" <qrp-1@Lehigh.EDU>
Subject: [76723] NOGA Meeting Notes Aug 6,2000 by AE4GX
Message-ID: <058CBAE0931FD411B70E00805FCD5D42248630@MAILSERVER2>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

The Summer time heat didn't slow down the QRP activity at the North Georgia QRP Club meeting. We had 26 sign-ins, 5 first time and 4 out of state attendees. Wow, in addition to the regular NOGA members that travel from up to 100 miles to attend we had Gene NN7CK Asheville, NC, Larry WA4PJP Spring City, TN Jeff KV4BO Soddy,TN and Craig NM4T Madison, AL. Thanks guys for making the effort.

We are filling the training room at RadioShack.com for this meeting with regularity now. The extra hour we have added to the meeting time is being consumed too. So QRP is alive and well in the deep South!

There was a ton of discussion going on before, during and after the official 10AM to 1PM time scheduled. Some of the show and tell items that I remember included:

Tom K4TJD showed his NJQRP SOP 40 mtr Rcvr and discussed the kit mods and the test items included with the kit (AF osc and RF probe). Several NOGA members have the SOP and there was a lively discussion on the kit and the performance. Tom also had a very neatly built SMK-1 in the NJQRP enclosure.

Sam AE4GX showed his prototype multi-band xcvr to eventually be used for stealth travel activities. The design in the TT2 and MRX class VX0 xcvr. Sam showed his prized TT PM3A (40/20) xcvr that he recently got from a sale off the qrp-1 list.

Sam discussed the Nor-Easter 6 meter AM xcvr group built project and indicated that most of the 10 builders have received their group buy items. Hopefully in the next couple of months we'll have a few of these on the air.

For more details about this 6 meter project check out
http://www.geneseo.net/~hollingw/images/6m_am.pdf for the original Rich Littlefield article form Comm. Qtrly and
<http://members.home.net/fspinner/WOFMS/IowaQRP> for the IOWA QRP on-line QTRLY Journal and the Walt Holling's N9MZP article that got the NOGA guys interested. Russ AE4NY has one parts set (PCB, PTT relay, inductor, 2 xtals 50.400 and 50.250) that he will part with if you want to get in on this fun.

Russ can be contacted by email at rricha2@emory.edu

BTW individual PCB boards are available from FAR Circuits check out their catalogue at FAR Circuits farcir@ais.net

Mike K04WX showed his SOP and definitely added to the SOP discussion. Mike and Sam operated independently for the ARS Bumblebee Contest last weekend and discussed their activities and recommended that everyone try the monthly ARS Spartan Sprint on the first Monday night of each month. Check the ARS web site for details at <http://www.natworld.com/ars/>

BTW Mike is heading to Germany on a business trip soon and will be operating QRP with his DSW20 too. He'll try the end-fed coax dipole mentioned below.

Mike W3IRZ had a great report on the initial NOGA-Watt kit offering. He as kitted a limited number and is looking for someone to pick up a national sale. This is a very special kit that all QRPers could use. You can contact MIke W3IRZ at w3irz@att.net

Mike also had a limited number of glow in the dark (2 tube) transmitter kits to offer to the NOGA members are a zero profit (in fact probably negative since much of the parts came from his personal stash. It's a 1+ watt xtal controlled transmitter complete with power supply. Brings back memories of my Novice days in the late 1950's. Contact Mike at w3irz@att.net if you missed this.

Pickett AD4S gave a NOGAPIG kit report and also showed his new "Cool" K2 in the soft drink bag. Great item. Padded, insulated, light and relatively cheap. Several members showed similar packing bags for their gear. That's the neat thing about QRP gear its small enough to put into a wide variety of products designed for other things.

Jim AD4J showed several items used on is last Germany business where he operated QRP with his DSW20 and a neat end-fed dipole using a single piece of RG-174 and a 16 ft of insulated hookup wire. The coax piece forms one half of the dipole and the lead to the rig. A choke balun was made by winding 8-10 turns of the RG-174 around a roll of "unused" toilet paper to RF choke off the element from the remaining feeder. You can fine turn the SWR by varying the point of the choke relative to the element length. This is any old idea but you can see one example of it by looking at Dave Ingram' Book "How to Get Started in QRP" page 95 article "An End Fed Dipole for Condos. It's complete with drawings to help you see the components better than my brief explanation.

Alan KG4IEW a new addition to the NOGA group indicated he is getting started with his QRP operations with loaner gear from other NOGA members and showed the group a Digital Down Converter chip AD6620 that he is planning to try to

use in a new concept QRP rig he is planning. He should us a prototyping etching to use with the chip that has the ultra close pin closing much like the DDS chip family that some of us had worked with. Allen will be getting some advise and help from other NOGA members to get his prototyping testbed up and running. Good luck Allen and please keep us informed.

Gene NN7CK a visitor from Asheville, NC got into a detailed discussion on putting up wire antennas using slingshots and related launching aids. His real work is related to building cell sites so he gets a lot of in the field operating time with this sort of antenna erection method. thanks Gene for sharing your techniques. Maybe a short article and pictures for the NOGA web page would be helpful to folks across the country.

Russ AE4NY encouraged all NOGA folks to participate in the 2 mtr FM net and 80 mtr slow speed CW net on Tuesday nights. Check the NOGA web page for details.

Jim Stafford President of ARCI briefed the group on ARCI activities and encouraged all to join and participate with ARCI. Currently Mike K04WX is writing the QRV? column, Ed N4XY is the QQ Technical Editor, Ken W4DU is the FDIM chairman and Pickett AD4S was this year's FDIM proceedings Editor and Layout person. So NOGA is participating in the national ARCI effort. Thanks guys for the volunteer work.

We have been a little behind in our own NOGA web page with updates due to members being busy with work and family activities and we hope to get additional volunteered to help in some of these thankless administrative duties.

Hope to see you again next month, First Saturday of each month currently at RadioShack.com store on Buford Hwy just outside of I-285 and Buford intersection. See with the web page or me for more details.

This one one members view and is NOT complete. Check the NOGA web page is a few days for more complete info.

Sam Billingsley AE4GX Atlanta, GA
personal web page at <http://ae4gx.home.mindspring.com/>
North Georgia QRP Club web page at <http://www.qsl.net/nogaqrp/>

Date: Sun, 06 Aug 2000 11:17:36 -0400
From: Tom Isgro <k8cz@concentric.net>
To: jbarrett@stny.rr.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76724] Re: Question for antenna gurus...
Message-ID: <398D8190.9B7B9EFE@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jim Barrett - KF2DA wrote:

>
>
> The feed point is about 40 feet above ground, with the ends sloping down to
> anchors about 10 feet up. The problem is that the apex angle of the "V" is
> very narrow - probably only 10 degrees. The terminating supports are only 25
> feet apart. As a result, the two legs of the dipole are almost parallel. The
> layout of the lot prevents doing it any other way.
>

Well, I don't consider myself an expert, but most of what I've seen on
inverted beams recommends an apex angle of at least ninety degrees, and
the larger the better. It would seem that smaller angles (zero degrees
would be open wire feedline) increases the amount of signal cancellation
in the two ends of the antenna. Of course, you have to live with your
circumstances, so give it a try and see how well it works.

My other theory is that a lousy antenna is better than none at all.

Is there any chance you could erect an inverted L along the long axis of
your property? Just a thought, might do better than the narrow vee,
even trying a vertical may be an improvement.

Experiment!
72, 73 oo's
Tom K8CZ Hamilton, OH
FPqrp #-41, QRP-l 945, FISTS 2360, NORCAL 2113, ARCI 9606,
10-10 68364, SCI 1479, ARS 203, ARRL

Date: Sun, 6 Aug 2000 08:33:26 -0700
From: "Coote, Jay" <JCoote@ci.arcadia.ca.us>
To: "'jbarrett@stny.rr.com'" <jbarrett@stny.rr.com>, Low Power Amateur Radio
Discussion <qrp-l@Lehigh.EDU>
Subject: [76725] RE: Question for antenna gurus...

Message-ID: <131CE266CAD0D211B3550008C7C9A2D51CBCBF@arcadia-pd1.arcadiapd.com>
MIME-Version: 1.0
Content-Type: text/plain

Jim and List:

First, try the antenna. It will work better than an indoor stealth antenna and may work better than the wire fifteen feet above ground. later on, try other center-fed arrangements such as a lazy L, half-square, loop...etc. You might look at feeding a random wire/counterpoise with the balanced line. Correct, there may be an imbalance along the feedline but hams have fed unsymmetrical antennas in this manner before.

73

Jay

W6CJ

-----Original Message-----

From: Jim Barrett - KF2DA [mailto:jbarrett@stny.rr.com]

Sent: Sunday, August 06, 2000 7:57 AM

To: Low Power Amateur Radio Discussion

Subject: Question for antenna gurus...

Greetings

After many years of living in an apartment, and having to make do with inefficient indoor and "hidden" HF antenna solutions, I have finally become a homeowner. Now I can finally get my "skyhook" outside where it belongs!

My only problem is that my lot isn't terribly large - it's deep enough, but not very wide. I have erected a tripod and mast at the peak of the (2nd story) roof. I just completed construction of a multi-band dipole (70-foot legs), fed with ladder line.

The feed point is about 40 feet above ground, with the ends sloping down to anchors about 10 feet up. The problem is that the apex angle of the "V" is very narrow - probably only 10 degrees. The terminating supports are only 25 feet apart. As a result, the two legs of the dipole are almost parallel. The layout of the lot prevents doing it any other way.

I haven't had a chance to try it on air yet. It's raining quite heavily today, and I still have to get the feedline run into the house. I'm curious as to what effect such a "closed" V may have on antenna efficiency and radiation pattern.

There is a possibility that I may be able to negotiate with a neighbor to anchor one of the legs to a tree on his property. That would allow me to open the apex angle up to about 50 degrees. But, the neighbor in question is out of town for the next two weeks - and I'm operating on the assumption that I will not be able to do this...

My rig is a K2, and I had excellent results at my old place using only a 45-foot end-fed # 28 wire, up just 15 feet above ground, so I have to believe that my new setup will be better than that.

Any insights would be appreciated.

72 es 73

Jim Barrett - KF2DA

Date: Sun, 6 Aug 2000 09:51:44 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "Coote, Jay" <JCoote@ci.arcadia.ca.us>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76726] RE: Antenna Tuner adjustment question
Message-ID: <Pine.LNX.4.10.10008060936110.990-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

If you have a tuner that is a large high Q coil tapped, and 2 air variable capacitors, and you have them adjusted such that the transmitter sees a 50 ohm load, several things are good.

The transmitter if it's transistors is happy and you transfer maximum power to the load in all cases.

The loss in this tuner is so small you can not measure it. The coil does have a real "Q" so the equivalent circuit can show a perfect inductor in parallel with a resistor. With a Q of 80 or so this resistor

is of very high value. So expect 98% of the input power to arrive at the output.

The original method given to tune the antenna tuner is correct but the stated reason is non-sense. Play around with your tuner a bit and you will see why. There is usually just one setting of the input and output capacitor that yeilds a 50 ohm input. It is a good idea to use the smallest amount of inductance so start with the smallest first and work to larger inductance until you find the right tap.

Automatic tuners are nice. The K-2 has one that works very well and you just press a button and the antenna is tuned.

On Sun, 6 Aug 2000, Coote, Jay wrote:

> Craig and the List;
>
> If you have a tuner with a tapped coil and switch you might try
> rough-tuning by setting the caps at fully meshed on 160-80-40 and maybe
> half meshed on 30-20-17-15-12-10. While receiving noise or a
> station, switch the coil first and adjust the caps for maximum noise
> or signal in the receiver. This adjustment is very rough.
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> The next step would be to apply a little power (QRL?) and adjust for
> a low SWR on each band or sub-band. With tapped-inductor tuners
> there may be several settings which give an acceptable SWR.
> Go with the setting which provides the stongest signal at
> the other end. This will probably be the high capacitance
> setting as suggested in the Sterba article.
>
> Disregard any old tuner lore about choosing a tuner setting which
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> the best filtering or harmonic attenuation. The filtering components
> in the radio are supposed to do this and I believe the T-tuner is
> a high-pass filter in "some" configurations. If you are worried
> about harmonics or BCI, use a filter between the tuner and radio,
> it's 1/4 the cost of a tuner and more reliable.
>
> If you are using a tapped-inductor tuner for a permanent antenna,
> make up a card or print a label which shows the tuner settings for
> each sub-band. If you use the same antenna and tuner, but in
> different sites, you will find that the settings will change and
> the cheat card will only help with rough settings.
>
> 72
> Jay

> W6CJ
>
> -----Original Message-----
> From: Craig B. Johnson [mailto:cbjohns@mn.mediaone.net]
> Sent: Saturday, August 05, 2000 7:22 PM
> To: Low Power Amateur Radio Discussion
> Subject: Antenna Tuner adjustment question
>
>
> I was reading the "Kurt Sterba" article about antenna tuners in
> the August 2000 issue of WorldRadio. I know that Kurt
> never makes a mistake (!!) but something there seems wrong to
> me. Kurt is describing how to adjust a tuner for minimum loss and
> maximum efficiency. In his instructions, he says:
>
> "Here is how to get it: Start with both of the capacitors set at
> maximum capacitance. Next adjust the "antenna" or "load"
> capacitor and the coil to get minimum SWR. If this minimum is
> not 1:1 then reduce the capacitance of the "transmitter" or "input"
> capacitor and try again.
> Keep doing this until you get 1:1 SWR with the "input" capacitor as
> large
> as possible. Following this procedure you may cut your losses in
> half."
>
> My problem with this statement is that I always thought you should
> attempt to maximize the "output" (antenna) capacitor, rather than
> maximizing the "input" (transmitter) capacitor.
>
> I just attempted to follow his procedure, and it seems like a real pain.
>
> I guess it may, in fact, result in maximum capacitance on the output
> capacitor. I just don't like to adjust the output capacitor and coil
> simultaneously. My tuner has a tapped inductor rather than a roller
> inductor, so I don't want to switch it "hot". I would rather set the
> coil tap,
> start transmitting, and adjust the two capacitors for a 1:1 SWR. I stop
> transmitting before I change the coil tap again. Since there are
> several
> coil settings that result in 1:1 SWR, I always try to use the coil
> setting
> that results in the "output" capacitor being as high as possible. The
> input
> capacitor is set to whatever it needs to be to get the 1:1 SWR.
>
> Am I reading this wrong?
>
> 73,

> - Craig, AA0ZZ

>

>

>

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Sun, 6 Aug 2000 11:53:32 -0400
From: Tom Randall <trandall@idsi.net>
To: qrp-l@Lehigh.EDU
Subject: [76727] Re: Batteries Indoors
Message-ID: <200008061553.e76FrVA04857@mail.idsi.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I agree with Jay, you still need decent ventilation, I believe the AGM types are less of a problem however. You really have to be the most concerned during charging, that's when the gases could be a problem, especially if overcharging occurs.

Jay mentioned seeing the sides of batteries inflate, I recently seen this happen at work with 2 6V batteries powering an emergency light. They both expanded and melted together and were quite hot when we yanked them out. I wondered if the charging circuit was shot, my guess is that it probably is. Close call...

I use a 4ah battery here in the shack for my 9040 and throw it outside on the solar panel/charge controller when it's time to charge it.

73,

Tom

Jay Wrote:

"I'd still want to provide ventilation for a sealed or gel battery. I would assume that the battery will outgas hydrogen, oxygen. I know of a backup radio gel battery and charger in a city 911 center which failed and gave off hydrogen sulfide (rotten egg stench). The fire dispatchers nearly mutinied. "Sealed" batteries do have small vents for this purpose, but when the outgassing exceeds the capability of the vents, it is impressive to see the sides of the battery inflate! If you have large indoor batteries, put them inside RV or marine-type

battery boxes and get some air ventilation in the area.
72 Jay W6CJ"

Tom Randall -- tprandall@idsi.net (Remove the "P" to e-mail me)
Amateur Radio: KB2SMS (Grid FN31) - ARRL / 10-10 / QRP-L #1965
Look for me on PSK31 on 14.069.5 and 28.119.5

Member: AAVSO Solar Division

My Astronomy/Ham radio site: <http://www.idsi.net/~trandall/welcome.html>

Date: Sun, 6 Aug 2000 11:58:25 -0400
From: "John J. McDonough" <wb8rcr@arrl.net>
To: <n0rc@qsl.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [76728] Re: OOPS! NC20 Xtal toasted
Message-ID: <001d01bffffbf\$28c07080\$010044c0@Conor.baycty1.mi.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Take a peek at DigiKey's catalog (<http://www.digikey.com>). I just picked up what appears to be an identical crystal (for a different purpose). SE3333 - \$\$1.47. Happens I picked up 3 different crystals, that was the most expensive.

The good news is that DigiKey is amazingly quick delivery. The bad news is a \$25 minimum order. (But it's not at all hard to find \$25 worth of stuff you gotta have!)

72/73 de WB8RCR <http://members.home.com/wb8rcr/index.htm>
didileydadidah QRP-L #1446 Code Warriors #35

-----Original Message-----

From: Rod, N0RC <n0rc@qsl.net>
Subject: OOPS! NC20 Xtal toasted

>I need a new 100kHz XTAL (X8) for my NC20, I think. But where can I
>get one? Red Hot is closed for the summer. Anybody know where the
>parts came from so that I can order one? Maybe have an extra they are
>willing to sell?

Date: Sun, 6 Aug 2000 12:05:53 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu
Subject: [76729] 11 oz 20m Vertical
Message-ID: <90.7f8a303.26bee6e1@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I found theis article for an 11oz 20M vertical (QST Dec 1995). You can view
at <http://www2.arrl.org/tis/info/Vertical-H.html#plain>.
Designed for backpacking and uses the shock cord-tubing for the mast. Also
discusses using phased verticals.

Alan KB7MBI

Date: Sun, 06 Aug 2000 10:09:11 -0600
From: "James R. Duffey" <jamesd1@flash.net>
To: <cbjohns@mn.mediaone.net>, qrp-1 <qrp-1@lehigh.edu>
Subject: [76730] [ANT] Antenna Tuner Adjustment Question
Message-ID: <B5B2E9C6.1F7E%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Craig - What Sterba describes in the WorldRadio article will result in a
match with low loss, but it is not necessarily universal.

The technique is best suited for tuners that can achieve a match at more than
one set of settings. This includes the T match and pi match.

For tuners that use an ell match (and the Z-match is of this type) there is
only one setting of the tuner components that will achieve a match.

So if you are using an ell match or Z-match and you achieve a tune you have also achieved the most efficient tune as you have achieved the only tune.

Even with the other types of tuners, efficiency does not change too much from one setting to another.

There was a series of antenna tuner efficiency measurements posted here a few years ago. It is archived some where on the net and I can't find my bookmark now. I can't remember who posted it, but I think he is still on the list and I hope that he will let us know where to find his useful information.

--

James R. Duffey KK6MC/5
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Sun, 06 Aug 2000 12:33:28 -0400
From: John Wagner <john@neknetwork.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76731] QRP-L Website: Request for articles
Message-ID: <398D9358.F7DB5C8@neknetwork.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,

Although there are many (MANY!) fine articles already on the net covering QRP subjects, I feel there is a need for QRP articles that may fit in well within the context of this list. That being the case, I would like request that members of this list write articles for publication on the official QRP-L web site.

Submission Guidelines are found here:

<http://qrp.lehigh.edu/lists/qrp-l/articles.html>

The two subjects I came up with initially are Fox Hunts and Kit Building, I'm sure there are many others.

Feel free stretch your creative talent and add to our site!

73,

John, KB1ENS
QRP-L WebMaster

--

John Wagner - john@neknetwork.com
Web page: <http://www.neknetwork.com>
Personal Web page: <http://www.together.net/~jwag>

Date: Sun, 06 Aug 2000 11:35:47 -0500
From: Randy & Cara Randall <crrandal@seidata.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76732] Re: True Portable HF
Message-ID: <398D93E3.9FBCAAFA@seidata.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Too too much for me. Looks nice but the SGC 2020 is a LOT cheaper and the frequency coverage is better. Now if I were a rich man.....

Randy. KB8AS0

Jim/Julia wrote:

> No production, as yet. Rumored price is \$1995. That could be Canadian, though.
> Jim W7LS
>
> Randy & Cara Randall wrote:
>
> > Anyone have the pricing on this marvel?
> >
> > Randy.
> >
> > ARDUJENSKI@aol.com wrote:
> >
> > > With all the rigs available, they seem to share the same problem in that the
> > > enclosure or case is not travel and field friendly. Sure they all have bells
> > > and whistles, low battery drain and lightweight but get a little dirt and
> > > moisture or bump them a bit and then what?
> > >
> > > It was refreshing to see a rig that is really designed to go on the road
> > > (thanks to Jim W7LS for passing on this site):
> > > <http://www.silk.net/paracomm>

> > >
> > > ENJOY....Alan KB7MBI
> >
> > --
> >
> > "No one gives an oink about prom night or football, 'cause just gettin' home
> > from school safe is a gamble and a blessing..."--Billion Dollar Babies, Alice
> > Cooper

--

"No one gives an oink about prom night or football, 'cause just gettin' home from
school safe is a gamble and a blessing..."--Billion Dollar Babies, Alice Cooper

Date: Sun, 6 Aug 2000 12:31:32 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <jbarrett@stny.rr.com>, "Low Power Amateur Radio Discussion" <qrp-
1@Lehigh.EDU>
Subject: [76733] Re: Question for antenna gurus...
Message-ID: <003701bffffc4\$6f3b66a0\$0600a8c0@dad>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, I have a decent lot, but it's in a 'developement', so I have the
neighbors to consider. First I ran a wire from under the eve of the
roof by my bedroom to the trees out back, about 40feet. With
the drop to the window, then in, maybe 50-60 feet. Connected
to the 'wire' tap on the MFJ tuner.

Then I made a 40m dipole and got that 'across' the yard, fed with
300 twinlead to my MFJ tuner and then the K2.

Both antennas work, but the dipole is 'quieter'.

If I was in your shoes, I think I'd just start experimenting. First take
a single line up to the top of the tripod, then to the furthest point of
my lot, then maybe a dogleg across to the next furthest corner of
my lot. Just to see how it works.

For a more 'resonant' antenna, I think I'd see if I could do a dipole. Or just measure from the tip of your tripod to the furthest point and run a wire that has a 'cut' in it to hang over where you want to drop down to your window, and feed the cut with 300 or 450 ladder line. (As bad as some people say 300 twinlead is compared to 450 ladder, I find the 'good stuff' from Radio Shack works fantastic. Maybe 450 would be better, but really, by how much??? Besides, 300 twinlead is L:IGHT. You don't have that heavy load at the feed point you would with the high quality 450 ladder line.)

One thing I've discovered, longer is better. Unless you go and actually make a resonant antenna for a specific purpose/band, as long as you're tuning it, just get the longest thing up you can. With a tuner, you can MAKE it work. Sure, you can make it better, and maybe even later actually take it down and trim and do it right. But getting something up NOW can be more important than making it 'technically right' kind of thing. Worry about that when your neighbor gets back. THEN decide what to do.

Besides, you may find what works as junk works well enough it's not worth the effort to tear it down and do it over right for that extra performance. And who knows, it may work great!

As to the neighbor, DON'T ask. At least at first. What you should do is invite him over to 'show off' the radio. Play with it, make contacts with him. Get HIM interested, even if he doesn't have a license, or even want to get one.

Ask him for help tying off a wire, even if you have to MAKE work for him to help with, then invite him in to 'play radio' to see what he 'helped' with.

Trust me, even if was detrimental, it took twice as long, or even didn't go quite as well, have HIM do something, then share a brew to use it. I guarantee that even if he's not interested in doing it at all himself, he'll be supportive of your hobby, and I'll bet he 'brags' at his work that he 'helped' some poor HAM do an antenna.

You're planting the seed....

Then casually make the comment that if you could tie to his tree....

Mike

> After many years of living in an apartment, and having to make do with

> inefficient indoor and "hidden" HF antenna solutions, I have finally
become
> a homeowner. Now I can finally get my "skyhook" outside where it belongs!
>
> My only problem is that my lot isn't terribly large - it's deep enough,
but
> not very wide. I have erected a tripod and mast at the peak of the (2nd
> story) roof. I just completed construction of a multi-band dipole (70-foot
> legs), fed with ladder line.
>
> The feed point is about 40 feet above ground, with the ends sloping down
to
> anchors about 10 feet up. The problem is that the apex angle of the "V" is
> very narrow - probably only 10 degrees. The terminating supports are only
25
> feet apart. As a result, the two legs of the dipole are almost parallel.
The
> layout of the lot prevents doing it any other way.
>
> I haven't had a chance to try it on air yet. It's raining quite heavily
> today, and I still have to get the feedline run into the house. I'm
curious
> as to what effect such a "closed" V may have on antenna efficiency and
> radiation pattern.
>
> There is a possibility that I may be able to negotiate with a neighbor to
> anchor one of the legs to a tree on his property. That would allow me to
> open the apex angle up to about 50 degrees. But, the neighbor in question
is
> out of town for the next two weeks - and I'm operating on the assumption
> that I will not be able to do this...
>
> My rig is a K2, and I had excellent results at my old place using only a
45-
> foot end-fed # 28 wire, up just 15 feet above ground, so I have to believe
> that my new setup will be better than that.
>
> Any insights would be appreciated.
>
> 72 es 73
>
> Jim Barrett - KF2DA

Date: Sun, 06 Aug 2000 16:40:11 -0400

From: "Rich Dailey, KA80KH" <okh.npi@gte.net>
To: qrp-1@lehigh.edu
Subject: [76734] Questions answered - tn timer
Message-ID: <3.0.16.20000806164006.3fd76ad4@mail.gte.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Re: the tuna tin size - Looks like our tabby is going to learn to love a couple cans of 9Lives, as opposed to fancy feast.
5.5 ounces, but measuring the can shows it to be the right width.

And tn timer also for the Archive CDrom info.

tu de Rich

Rich Dailey, KA80KH <okh.npi@gte.net>
The KB4NPI/KA80KH Web <<http://home1.gte.net/web22jfw/index.htm>>
This is a self-referential sentence.

Date: Sun, 06 Aug 2000 10:06:28 -0700
From: Russ Dow <n7dw@garlic.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76735] Re: Antenna Tuner adjustment question
Message-ID: <398D9B14.284DDF88@garlic.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Karl,

I was going to reply to you privately, but I'll post to the list for whatever it's worth. I'm no engineer; this is just seat-of-the-pants experience, and it is exactly as you stated.

Generally I begin with both capacitors at mid range. Next I adjust the inductor for maximum noise (if I can hear any difference, often a problem for me) or else either minimum reflected or VSWR depending on the meter in use. If two or more inductor taps show promise, I try first with the setting of least inductance. Then I alternate adjusting the two capacitors for minimum reflected or VSWR. If I don't like what I see, I'll try again on adjacent taps and go with the best match I can find.

For a given inductor setting, once I find a combination that produces a minimum meter reading, that seems to be the best setting no matter what else I try.

After doing this, if the receiver sounds good, I'm ready to rumble. If it sounds like there's plenty of activity but badly attenuated, most likely I have a problem elsewhere in the antenna system. If there's nothing at all, I drop to a lower band.

BTW, I tried Kurt's method -- and ended up with identical settings but it took more fiddling and twiddling to get there.

Now off I go to the NorCal get-together. Eat your hearts out...

73,

Russ N7DW
Morgan Hill, CA
54 miles south of NorCal ;-)

"Karl F. Larsen" wrote:

```
>
>  << snip >>
>
>      The original method given to tune the antenna tuner is correct but
> the stated reason is non-sense. Play around with your tuner a bit and you
> will see why. There is usually just one setting of the input and output
> capacitor that yeilds a 50 ohm input. It is a good idea to use the
> smallest amount of inductance so start with the smallest first and work to
> larger inductance until you find the right tap.
>
>  << snip >>
>
```

Date: Sat, 5 Aug 2000 11:50:40 -0500
From: "Richard McGaver" <mcgaver@execpc.com>
To: <w9zm@yahoo.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [76736] Re: How to pack mobile antenna
Message-ID: <01e701bfff02\$6657a2a0\$258acfa9@Pmcgaver>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

PVC w/ end caps

Rick NK9G

-----Original Message-----

From: Duane Alles <w9zm@yahoo.com>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Date: Saturday, August 05, 2000 12:01 PM

Subject: How to pack mobile antenna

>Hello All,

>

>I'm going to fly to the East Coast and want to take my
>mobile rig. I use Valor Pro Am antenna's that break in
>half. (ham stick look alike) I'll need a hard case of
>some kind. Any Ideas??

>

>Thanks in advance

>

>72/73

>Duane, W9ZM

>

>

>-----
>Do You Yahoo!?

>Kick off your party with Yahoo! Invites.

><http://invites.yahoo.com/>

>

Date: Sun, 6 Aug 2000 13:47:52 -0400

From: Jerry Albertin <kg2jff@juno.com>

To: qrp-1@lehigh.edu

Subject: [76737] FS: MFJ 9020 and 564B paddles

Message-ID: <20000806.134755.-221009.0.kg2jff@juno.com>

MIME-Version: 1.0

Content-Type: text/plain

Content-Transfer-Encoding: 7bit

These items are surplus to my needs:

MFJ 9020 with MFJ 726 narrow audio filter and MFJ 412 curtis iambic
keyer. I have the original box and documentation \$125

MFJ 564B (black base) paddles. Original documentation but no box \$30

Prices do not include shipping from 12010 zip. Interested parties please email me direct.

Thanks.....Jerry

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<http://dl.www.juno.com/get/tagj>.

Date: Sun, 06 Aug 2000 12:50:53 -0500
From: "George , W5YR" <w5yr@att.net>
To: jamesd1@flash.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76738] Re: [ANT] Antenna Tuner Adjustment Question
Message-ID: <398DA57D.652BEC91@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The technique that I use with the MFJ 989C "T" tuner:

1. set the output cap of the T to its maximum.
2. set the input cap to mid-range.
3. set the L for maximum receiver signal/noise.
4. apply very low power and adjust the input cap and the L for lowest SWR indication - looking for setting with min L.
5. If that reduces SWR indication to 1:1, then complete.
6. If not, reduce output cap and goto 4.

I don't recall the source, but I have read that the T network tends to have minimum loss when operated with max output cap, min L and whatever input cap is required, larger being better. Evidently, part of this rationale comes from trying to minimize inductor loss by using a minimum L.

A series of articles has appeared in QST on tuner evaluations. This may be where I read the procedure described above.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

Date: Sun, 06 Aug 2000 13:56:53 -0400 (EDT)
From: "John L. Sielke" <n4js@pobox.com>
To: qrp-l@lehigh.edu
Cc: njqrp@njqrp.org, elecraft@qth.net
Subject: [76739] Delaware Bay Lighthouse Operation W2C
Message-ID: <XFMail.000806135653.n4js@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

It was a bit of a windy and rough day. Windy enough so the stainless steel bracket holding my radar antenna broke, and the zepp I strung in the outriggers finally snapped due to whipping around. Only worked about 27 stations, in 17 states and Canada. check

<http://www.qsl.net/n4js/lighthouse.html>

For some pictures and stuff.

Thanks to the QRP-L members who showed up to give me a contact.

/ \ / \ / \ / \ John L. Sielke n4js@pobox.com n4js@qsl.net
(N) (4) (J) (S) NJ Grid:FM29LN <http://www.qsl.net/n4js>
_ / _ / _ / _ / NJ-QRP #57 QRP-L #884 QRP-ARCI ARQrp #86
G-QRP #9544 NorCal #1989 CQC AKQRP QCWA FISTS #2781

Date: Sun, 6 Aug 2000 13:24:45 +0000
From: "Steven Weber" <kd1jv@moose.ncia.net>
To: jbarrett@stny.rr.com
Cc: qrp-l@lehigh.edu
Subject: [76740] Re: Question for antenna gurus...

Message-ID: <200008061801.OAA07296@wolf.ncia.net>

MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT

> My only problem is that my lot isn't terribly large - it's deep enough, but
> not very wide. I have erected a tripod and mast at the peak of the (2nd
> story) roof. I just completed construction of a multi-band dipole (70-foot
> legs), fed with ladder line.

>

Jim,

Well, since you have a tripod mounted on the peak of the house, run the wires off to opposite corners, then down the side of the house, or off to a fence/tree/shrub. That will give you a good angle at the top. If you put some 2-3 ft supports at the corners of the roof, that would help keep the wire off the roof too. 70 ft legs seem a little long, you could probably trim them down to 60 -65 ft and still do okay on 80 M with a tuner. Since you have open line feed, apperently, you do have a tuner.

My shop QTH is in a 35 x 25 ft single story building. I have a 5 ft PVC mast at the center of the roof peak. A 17M dipole runs from the mast to the peak of the roof on each side. A 20M dipole runs from the mast to two opposite corners of the roof. A 40M dipole runs to the other two opposite corners. One end of the 40M dipole runs past the roof line and is tied off to a fence in back. The front side goes to a utility pole at the corner of the building, then angles back and is tied off over the front door. All three dipoles are feed with a single run of RG-8X coax. Not the most ideal setup, but works reasonably well. Looks like a big spider web up there :-)

BTW, the PVC mast is attached to a couple pieces of water proofed plywood, 1 ft x 2 ft, using a Radio Shack roof mast mount. It just sits on the peak, no holes in the roof. All the wires guy it in place pretty well and we get some pretty strong winds blowing by here in the winter.

72,

Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Sun, 06 Aug 2000 14:02:29 -0400 (EDT)

From: "John L. Sielke" <n4js@pobox.com>

To: qrp-l@lehigh.edu

Subject: [76741] Changing Callsign on qrp-l

Message-ID: <XFMail.000806140229.n4js@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

I have a question that may be of general interest, and I can't find the answer in "welcome.txt" or on the website.

If one changes callsign, is it possible to carry your old qrp-l number over to the new callsign, and if so, how?

/ \ / \ / \ / \ John L. Sielke n4js@pobox.com n4js@qsl.net
(N)(4)(J)(S) NJ Grid:FM29LN <http://www.qsl.net/n4js>
/ _/_ _/_ _/_ NJ-QRP #57 QRP-L #884 QRP-ARCI ARQrp #86
G-QRP #9544 NorCal #1989 CQC AKQRP QCWA FISTS #2781

Date: Sun, 6 Aug 2000 12:25:38 -0600 (MDT)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-canada@lists.gpfn.sk.ca, qrp-l@lehigh.edu
Subject: [76742] PROP Conx. Sun 6AUG
Message-ID: <Pine.SUN.4.10.10008061157551.2110-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

Generally, the sun has been VERY quiet over the past week. The solar flux has been flirting around its 28-day minimum in the 150-160 range since July 27th, and still only 159 today (6 AUG). You might have noticed the "sluggish" propagation on 15M, and virtually nothing on 10M, in yesterday's North America Sprint ... and 20M kinda went to pieces around sundown. Just due to low solar flux, and hence weak ionization levels in our E and F layers (combined with a minor geomagnetic storm, see below).

Some active regions are again rotating into view, and the area that caused the huge X6 flare on 14JUL is about to re-emerge (if it's still intact). So solar activity, flares and CME's may be picking back up over the next week or two.

Saturday saw MINOR to MAJOR geomagnetic storm conditions early in the day, that made conditions on 20M and below a bit noisy, clearing up by

late afternoon. (Of course out here in the west, that's when the thunderstorm and lightning QRN kicked in too!). It is believed this geomagnetic storm was caused by a high speed coronal stream of solar electrons the earth flew through for a few hours. Solar wind went from about normal levels (400 km/s) to a bit over 600, enough to compress our magnetic field and generate lots of noise on HF.

As these electrons hit the earth's magnetic "bow shock," they tend to flow around our magnetic field to flow behind us. However, some do get trapped and flow along our magnetic field to fall into our polar regions, where our magnetic field is the weakest. At this point, these electrons will flow along our magnetic field lines generating a million amps of current (or more), kinda bouncing back and forth between the north and south magnetic poles. This current flow, of course, generates lots of noise on the HF bands.

These electrons/current is flowing far above our heads ... above the E and F layers for the most part. However, these electrons are also flowing very close to the ground in the polar regions where our electric field and magnetic field lines merge at the poles ... a typical toroidal pattern ... maximum near the equator, minimum at the poles. As these electrons flow from the poles outward, they pass through the D-layer in the higher latitudes ... like Alaska and Canada. These fast moving electrons (originally from the solar wind) will then ionize the D-layer more in the higher latitudes, but cause little extra ionization at the middle and lower latitudes. More ionization of the D-layer means more absorption to HF signals.

This is why during even active conditions or minor storm conditions, hams in the US (middle latitudes) will hear a little extra noise on the bands, but hams in Alaska or Canada can be in a near black out condition as the D-layer above their heads is far more ionized than the D-layer above our heads in the US. Signals coming IN to Canada are simply nearly totally absorbed by THEIR D-layer, and likewise, outgoing signals (especially QRP) will be all gobbled up as well in the higher latitudes.

So when you read these posts from our friends up north about how they can't hear a thing, and you just worked Solomon Islands with 100mW on the same band, now you know why such a profound difference. The QRPers up north ARE telling the truth -hi.

These same principles apply to the southern hemisphere SOUTH of about 45-50 degrees south latitude, effecting southern Australia, etc.

Coronal hole streams are often hard to predict (as they can not be directly seen by instruments), but NOAA feels the effects are over, for fairly quiet conditions over the next few days, with the A-index predicted in the 10 region for mildly active conditions.

10M and 15M will be "rough" with fast fading (QSB) until the solar flux starts to pick up and get out of the 150-160 region.

Enjoy the bands,
72, Paul NA5N

PS - These solar/geomagnetic/propagation reports and tutorials are now being reflected by QRP-CANADA in addition to QRP-L.

Date: Sun, 6 Aug 2000 12:25:13 -0600
From: Niels Jensen Kristjansson <nkristja@cadvision.com>
To: qrp-l@Lehigh.EDU
Subject: [76743] Little Thunder QRP Club Callsign
Message-ID: <1.5.4.16.20000806121533.1b9fd9a6@cadvision.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>X-From_: qrp-canada@gpfn.sk.ca Sun Aug 6 12:15:33 2000
>Date: Sun, 6 Aug 2000 12:15:24 -0600
>Errors-To: qrp-owner@gpfn.sk.ca
>Reply-To: flesnick@tbaytel.net
>Originator: qrp-canada@lists.gpfn.sk.ca
>Sender: qrp-canada@gpfn.sk.ca
>From: Fred Lesnick <flesnick@tbaytel.net>
>To: Multiple recipients of list QRP-CANADA <qrp-canada@lists.gpfn.sk.ca>
>Subject: Little Thunder QRP Club Callsign
>X-Listprocessor-Version: 6.0d -- ListProcessor by Anastasios Kotsikonas
>X-Comment: Amateur radio Canadian QRP list at the GPFN
>

>Gang:
> Finally got the callsign for the club.....Now we can use it in the
>contests, etc....

>1. Callsign: VE3LTQ
> Club: LITTLE THUNDER QRP CLUB
> Address: 2060 HWY 61
> THUNDER BAY, ON P7J 1B9
>
> Trustee: Frederick Andrew Lesnick
> Address: 2060 HIGHWAY 61
> THUNDER BAY, ON P7J 1B9
> Qualifications: BASIC 12WPM ADVANCED
>

>Just got this off the RAC webpage through IC....So ,now it is
>official....
>Fred
>VE3FAL
>Thunder Bay,Ontario
>EN58hh
>
>
>

Date: Sun, 6 Aug 2000 13:41:39 -0500
From: "Manager QRP-L" <manager@astro.cc.lehigh.edu>
To: "QRP-l" <qrp-l@lehigh.edu>
Subject: [76744] Excessive Quoting
Message-ID: <0aea01bffffd6\$17d3bd60\$0200000a@mcg.net>

Gang,

I've seen many messages that have excessively long attached quotes, some even including the text of the entire text of the past three messages in a thread. I know must email programs automatically quote the previous message, but please delete as much of this as you can. In many cases you should be able to delete the entire quote completely as those reading the thread have already read it.

I understand that sometimes email gets away from you, it's happened to me before. But I have received some complaints and it's especially annoying to the digest readers. It also wastes our hosts hard drive space, slows down archive searches and wastes QRP-L CD-ROM space.

This subject is a part of the "Posting Guidelines" so everyone should be aware of it. The full text of the "Posting Guidelines" are on our new web pages at:
(Thanks John)

<http://qrp.lehigh.edu/lists/qrp-l/guidelines.html>

Should you have questions or concerns about this policy please direct them to me directly and not the list.

Thank you and 73 de Cla KA0GKC Manager QRP-L

You can simulate the roller inductor by placing a third variable capacitor (a 100 pf or so) across your tapped coil so you can tune quickly without having to crank a lot of turns like you do with a roller. You end up with a higher Q (less harmonics) but a narrower BW.

Mike Branca W3IRZ in Conyers Georgia

----- Original Message -----

From: Craig B. Johnson <cbjohns@mn.mediaone.net>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Sent: Saturday, August 05, 2000 9:21 PM

Subject: Antenna Tuner adjustment question

> I was reading the "Kurt Sterba" article about antenna tuners in
> the August 2000 issue of WorldRadio. I know that Kurt
> never makes a mistake (!!) but something there seems wrong to
> me. Kurt is describing how to adjust a tuner for minimum loss and
> maximum efficiency. In his instructions, he says:
>
> "Here is how to get it: Start with both of the capacitors set at
> maximum capacitance. Next adjust the "antenna" or "load"
> capacitor and the coil to get minimum SWR. If this minimum is
> not 1:1 then reduce the capacitance of the "transmitter" or "input"
> capacitor and try again.
> Keep doing this until you get 1:1 SWR with the "input" capacitor as large
> as possible. Following this procedure you may cut your losses in
> half."
>
> My problem with this statement is that I always thought you should
> attempt to maximize the "output" (antenna) capacitor, rather than
> maximizing the "input" (transmitter) capacitor.
>
> I just attempted to follow his procedure, and it seems like a real pain.
> I guess it may, in fact, result in maximum capacitance on the output
> capacitor. I just don't like to adjust the output capacitor and coil
> simultaneously. My tuner has a tapped inductor rather than a roller
> inductor, so I don't want to switch it "hot". I would rather set the coil
tap,
> start transmitting, and adjust the two capacitors for a 1:1 SWR. I stop
> transmitting before I change the coil tap again. Since there are several
> coil settings that result in 1:1 SWR, I always try to use the coil setting
> that results in the "output" capacitor being as high as possible. The
input

> capacitor is set to whatever it needs to be to get the 1:1 SWR.
>
> Am I reading this wrong?
>
> 73,
> - Craig, AA0ZZ
>
>
>

Date: Sun, 6 Aug 2000 12:37:27 -0700
From: "Coote, Jay" <JCoote@ci.arcadia.ca.us>
To: "'w3irz@att.net'" <w3irz@att.net>, Low Power Amateur Radio Discussion <qrp-
l@Lehigh.EDU>
Subject: [76747] RE: Antenna Tuner adjustment question
Message-ID: <131CE266CAD0D211B3550008C7C9A2D51CBCC1@arcadia-pd1.arcadiapd.com>
MIME-Version: 1.0
Content-Type: text/plain

Mike's comment below reminds me of variations of the "T" tuner.
In the 70's, ARRL books had an "Ultimate Transmatch". The UT used
a split capacitor across the input- I forget why. More recent
ARRL books featured the "SPC Transmatch" (Series-Parallel Capacitance).
The SPC uses a split capacitor with half across the inductor and the
other half in series with the antenna port. The SPC was supposed to
be far superior to ordinary T designs and the "Ultimate". I think the
SPC was supposed to be better in the loss department, required less
inductance and was easier to obtain a match? Has anyone compared T vs.
UT vs. SPC in a lab with E or I measurements using various loads, or
swept with a return loss bridge?

Jay
W6CJ

(snip)
You can simulate the roller inductor by placing a third variable
capacitor
(a 100 pf or so) across your tapped coil so you can tune quickly without
having to crank a lot of turns like you do with a roller. You end up
with a
higher Q (less harmonics) but a narrower BW.

Mike Branca W3IRZ in Conyers Georgia
(snip)

Date: Sun, 6 Aug 2000 15:18:44 -0500
From: "Robert H. Sorge" <rhsorge@juno.com>
To: qrp-1@Lehigh.EDU
Subject: [76748] ATU signal loss.
Message-ID: <20000806.151844.-224519.3.rhsorge@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

What tuner do i need?

I want to use my inverted vee dipole on more than 40 meters, so I plan to feed it with ladder line and match the impedance to my transmitter with a tuner. I have seen information on many different types of matching units, to name a few, "Z-Match", "Link-Coupled tuner", "Balanced Line Tuner", "T-Match with 4:1 balun",

Which one is the most efficient for QRP operating levels (1-5 watts)?

I'm sure there may be a measurable difference, but can one hear the difference in terms of signal strength?

Bob Sorge

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<http://dl.www.juno.com/get/tagj>.

Date: Sun, 6 Aug 2000 14:36:42 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@lehigh.edu
Subject: [76749] FOX- Jim's doing ok here in CO
Message-ID: <398D77FA.23729.D4B20D@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Got him about 3rd, I think, at 2201Z. That was surprising, actually, because his signal was pretty well down-- 5-3 to 5-5 max, so mine couldn't have been much stronger at his end.

He's still working a pileup, so it looks as if everything is set for a good rund.

Go Jim! And Go Dawgs!

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

Date: Sun, 6 Aug 2000 14:39:15 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "Robert H. Sorge" <rhsorge@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76750] Re: ATU signal loss.
Message-ID: <Pine.LNX.4.10.10008061431200.970-1000000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Bob a couple of points on ATU loss. This loss is due to equivalent resistance elements in the tuner due to REAL components, so the loss is a function of the power input.

For example a tuner might lose 50 watts when the input power is 1000 watts. If the input power is 10 watts the same tuner will lose only 0.5 watts. This is not a problem in either the QRO or QRP case.

So a common MFJ Tuner will work fine on QRP. My old MFJ-941C works so well I can tune up the antenna using the 2 watts from my Argonaut and worked the FOX after just 5 calls!

On Sun, 6 Aug 2000, Robert H. Sorge wrote:

> What tuner do i need?
> I want to use my inverted vee dipole on more than 40 meters, so I plan to
> feed it with ladder line and match the impedance to my transmitter with a
> tuner. I have seen information on many different types of matching
> units, to name a few, "Z-Match", "Link-Coupled tuner", "Balanced Line
> Tuner", "T-Match with 4:1 balun",
>
> Which one is the most efficient for QRP operating levels (1-5 watts)?
>
> I'm sure there may be a measurable difference, but can one hear the
> difference in terms of signal strength?
>
> Bob Sorge
>
> -----
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> <http://dl.www.juno.com/get/tagj>.
>
>

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Sun, 06 Aug 2000 16:30:36 -0400
From: Bob Kellogg <ae4ic@nr.infi.net>
To: jamesd1@flash.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [76751] Re: [ANT] Antenna Tuner Adjustment Question
Message-ID: <398DCAEC.F0F3400B@nr.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Guys,

I was doing the tuner tests. I don't have a website, and can't remember myself who kept them on the net. I've tested a couple of other tuners since then, and need to update the series.

In the meantime, a summary is on the QRP-L archive CD. They are archived under "Antenna Tuner Tests"

"James R. Duffey" wrote:

> There was a series of antenna tuner efficiency measurements posted here a
> few years ago. It is archived some where on the net and I can't find my
> bookmark now. I can't remember who posted it, but I think he is still on the
> list and I hope that he will let us know where to find his useful
> information.

--

73,
Bob Kellogg, AE4IC, Greensboro, NC
Prolobly, not nececelery. - Benny Hill

Date: Sun, 6 Aug 2000 15:32:55 -0500
From: Todd Enders <enders@bolshoi.cc.misu.nodak.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [76752] Fox: Not Today, I Fear... :-(
Message-ID: <200008062032.AA00714@bolshoi.cc.misu.nodak.edu>
Content-Type: text/plain
Mime-Version: 1.0 (NeXT Mail 4.2mach_patches v148.2)

Can't hear him, can't hear most of the hounds, but I do hear an EA4 calling CQ right over the top of them. Will tough it out and hope the band shifts gears, but it doesn't look promising... :-(

72/73,

Todd, AG0T
QRP-L# 2211 ND

Date: Sun, 6 Aug 2000 16:47:20 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: Jim NOUR <n0ur@yahoo.com>
Cc: "W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>, QRP-L Discussion Group <QRP-L@Lehigh.edu>
Subject: [76753] WOW!--Pelt at 2034 :-(
Message-ID: <200008061647_MC2-AED1-C59E@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Jim:

Well thanks very much for digging me out of the pileup at 2034Z. I could= hear you at the beginning of the hunt, but then you got down to ESP level= . =

Suddenly at 2034 your signal came up to 559--and BANG....dropped you with= the K2. Wow. This is truly a thrill given the skip here. Had to use th= e full 5 watts today.

Antenna was indeed the dipole NVIS at 10'. Couldn't hear you at all on the 540' loop or the GAP up 9'. So it was worth the time to put up this temporary antenna :-). Sounds like you had plenty of hounds, and I hope you set a record overall.

72/73,

--W.D. (Doc) Lindsey QRP #861

DSBF

PO Box 6028

Bismarck, ND 58506

(Shipping =3D DSBF, 2020 Lovett Ave, Bismarck, ND, 58504)

E-Mail =3D K0EVZ@arrl.net

Date: Sun, 6 Aug 2000 14:51:16 -0600 (MDT)

From: "Karl F. Larsen" <k5di@zianet.com>

To: QRP-L List <qrp-l@lehigh.edu>

Subject: [76754] FOX is busy today

Message-ID: <Pine.LNX.4.10.10008061450250.1024-1000000@cannac.ampr.org>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Jim is working them fast now on 14.053 MHz with Doc K0EVZ calling and calling with 99.8% of his power coming south to Las Cruces, NM. Doc your 599+40 here!

Jim is just 579 but very stable and seems to be hearing well, except for Doc...:-) I hope Doc is this strong next Thursday when he is the FOX again.

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Sun, 6 Aug 2000 17:03:11 -0400

From: "Wilford D. Lindsey" <70511.3041@compuserve.com>

To: "INTERNET:k5di@zianet.com" <k5di@zianet.com>

Cc: "W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>, QRP-L Discussion Group <QRP-L@Lehigh.edu>

Subject: [76755] FOX is busy today

Message-ID: <200008061703_MC2-AEC7-C457@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: quoted-printable

Content-Type: text/plain;
charset=ISO-8859-1

Content-Disposition: inline

Karl:

Well thanks for the signal report. I finally bagged Jim Da FOX at 2034. =

He had been good copy at the beginning of the hunt, only to drop down into
the noise. Suddenly at 2034 he popped his furry hear--and BLAM, I dropped
him with the mighty K2 at 5 watts.

Antenna was a new dipole up only 10', to act as a NVIS. Guess it finally=

worked. I had two other antennas at the ready on the Alpha-Delta coax
antenna switch, but could not hear Jim at all on them. Glad the NVIS
experiment worked. Jim is about 300 miles from here, so it was very
dicey.

Glad you got yet another pelt, and I will indeed be Da FOX this coming
Thursday evening. Hope to hear you then.

72/73,

--W.D. (Doc) Lindsey

DSBF

PO Box 6028

Bismarck, ND 58506

(Shipping =3D DSBF, 2020 Lovett Ave, Bismarck, ND, 58504)

E-Mail =3D K0EVZ@arrl.net

Date: Sun, 06 Aug 2000 17:02:47 EDT

From: n5ib@juno.com

To: qrp-l@Lehigh.edu

Subject: [76756] FOX - tough pelt to find

Message-ID: <20000806.160016.4655.0.N5IB@juno.com>

Boy, signals are weak and few today. The fox is weak and only a couple of
hounds are heard at about 2040 Z. I missed the first part of the hunt
driving back from Monroe LA, and just got in and turned on the K2. Maybe
it was better earlier.

Managed to work Jim on the second call at about 14062 at 2052 Z. He had been down around 14053 and I was lucky enough to hear him announce the QSY up. Don't know if I'd have found him if I didn't know where to look from his earlier post.

72

Jim N5IB

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<http://dl.www.juno.com/get/tagj>.

Date: Sun, 6 Aug 2000 14:09:19 -0700

From: Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>

To: "'qrpl'" <qrpl@Lehigh.EDU>, "'dlh1009@ritvax.isc.rit.edu'"
<dlh1009@ritvax.isc.rit.edu>

Subject: [76757] Re: New Fox killer radio

Message-ID: <87568F78ABDCD211A0AC0008C707718B029D0FA1@az10exm03.sat.mot.com>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

>You do bring up some interesting ideas, though.

>You know, one other thing comes to mind while we're discussing this...

>as long as we're throwing CPU cycles around, we could make the radio

>portion of this system the front-end of a phasing receiver / exciter,

>and do the audio phase shifting in DSP

>code. It'd make the radio downright simple - no crystal filters, etc.

>And if we use the Tayloe mixer, even the quadrature mixers are cheap.

Yes, I have been thinking about using a DSP and a A/D & D/A pair to do both receive and transmit. It is a little known fact that the Tayloe mixer run in reverse directly produces SSB signals given properly phased audio inputs. Just like the crystal filter in a normal SSB transceiver, the phasing strip can be used for both rx and tx.

I used to think that my SSB generator idea was kind of cute and original until someone sent me an old article that showed SSB transmission being generated using the four phase outputs (0, 90, 180, 270) of an R/C phasing network being muxed with a 4x clock to a single RF output. Just add a low pass filter to clean up the 4x clocking stuff and you have a SSB signal, which

could include cw. I tried it. It works. It is an interesting way to get

about 50 mw of SSB (or cw or PSK) using nothing but audio and a high speed mux.

A DSP is on my list to try some time, but current high accuracy A/Ds are power hogs (that should improve over time), which does not meet my requirements for low power portable stuff. Beyond that, folks like TI want big bucks for their DSP code development software and debugger environments. I wish they had more of the Microchip (pic processors) spirit where the development stuff is either free or dirt cheap! And free for 30 days does not count!

On the other hand, wide bandwidth receivers for PSK as mentioned earlier suffer from large signal capture effects. Weak signals get blown away by very strong signals. Benson even brings this up in his PSK QST article.

That is why we use selective crystal filters to pick out the weak signals we want and reject the strong signals we don't want. We weed out the strong signal early in the gain process so it won't overload subsequent gain stages.

A simple DC DSP quadrature receiver with a wide bandwidth and a high dynamic range A/D could overcome this problem weak signal/strong signal problem in a way that a conventional receiver could not do, since all the "gain" is in DSP software, and not in analog hardware. In a DSP, dynamic range simply means a larger word length (more bits) to work with in the mathematical filtering algorithms.

- Dan Tayloe, N7VE; Phoenix, Az; Az ScQRPions

Date: Sun, 6 Aug 2000 14:18:23 -0700 (PDT)
From: Jim Hale <kj5tf@yahoo.com>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [76758] Need strong glue for electro project
Message-ID: <20000806211823.4848.qmail@web704.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

I need to glue some coax solidly into place, and keep it from moveing. Right now I have a wire tie acting as stress relief. But the coax can still rotate a little.

I need some kind of glue thats safe for electronic parts, and very strong.

What is something I can find locally?

Thanks, 73's Jim KJ5TF

=====

<http://www.madisoncounty.net/~kj5tf/>
Milliwatting Editor ARCI QRP Quarterly
Join/renew membership QRP Amateur Radio Club International
<http://www.qrparci.org/arcijoin.html>
AR QRP#2 - Kingston, Arkansas 35.94N 93.47W
Private email kj5tf@madisoncounty.net

Do You Yahoo!?

Kick off your party with Yahoo! Invites.

<http://invites.yahoo.com/>

Date: Sun, 6 Aug 2000 17:22:29 -0400
From: "George Heron N2APB" <n2apb@erols.com>
To: "NJQRP" <NJQRP@njqrp.org>, "QRP-L" <qrp-l@lehigh.edu>
Subject: [76759] My favorite projects from FAR Circuits
Message-ID: <010801bffffec\$719f6720\$0100000a@gheron>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm repeatedly awed by the number of project circuit boards FAR Circuits has available. Out of the thousands of such inexpensive boards on their website, I thought I'd share my list of favorites in hopes that it might be of similar interest to those on this list:

HW8 Audio Amp (73, June 91)
Log Audio Speech Procressor (2 bd set, Comm Quart Winter 97)
Active CW Filter (W1FB QRP Notebook 91)
Switch Capacitor audio Filter (QRPP Summer 98)
500 MHz Freq Cntr Prescaler & Counter (ARRL HB 91)
Simple PIC Keyer (73 Sept 99)
An MX614 Packet Modem (QST Dec 99)
W1FB VFO (CQ Jun 91)
VFO with Bandsread and Bandset (QRP Classics)
Beginner's Look at Basic Oscillators (QRP Classics)
DDS VFO (AD9850 + PIC from WB2V QEX July 97)
40m Receiver AM/CW/SSB (2 bds, 73 Feb 99)

Billerica ARS Shortwave Regen Receiver
Ugly Weekender Receiver (QST Jun 92)
QRP Directional Wattmeter (QST Feb 90)
Microwatter by K7OWJ 10nW-to-10uW (QST Jun 97)
Tixie II with TiCK Keyer (QRPP Winter 97)
NorCal 49er (QRPP)
Ugly Weekender II Transmitter (QST Jun 92)
W7ZOI Little Joe Transmitter (QRP Classics)
PIC16F84-Based CW Decoder (for 16x1 LCD, QST Aug 99)
KD1JV LCD Keyer (KD1JV)

And for the newcomers who might not be aware of this magnificent resource available to homebrewers, let me state a couple of facts to help put it in perspective:

- the idea is that FAR provides the pc board(s) for projects published in various magazines (esp. QST, Handbook, etc.)
- they also supply a copy of the article for use as a guide in gathering parts and constructing the project
- the average price for these projects is on the order of \$5 (more for bigger or board sets)
- after getting the pc board from FAR, you then scour the junk box and countryside for the parts you need to complete the project

You can see everything for yourself at <http://www.cl.ais.net/~farcir/> which is a well-organized website with descriptions (or links to the descriptions) of the projects. I guarantee that you'll spend many minutes browsing the projects and making a list of *your* favorite projects to be done.

I have no affiliation with FAR Circuits ... just many of their pc boards in my shack. Happy homebrewing!

72, George N2APB
n2apb@amsat.org

Date: Sun, 6 Aug 2000 17:44:25 EDT
From: BenNW7DX@aol.com
To: rerobins@email.uncc.edu, qrp-1@lehigh.edu
Subject: [76760] Re: W7/JR1 in the Bumble Bee contest
Message-ID: <6c.1db7e69.26bf3639@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello -

I hope I'm not too late with this reply... I just came back from a cruise to Alaska (a couple hours ago) and have an overflowing mailbox waiting!

I know Atsushi - W7/JR1NKN very well. He lives a few minutes away from my house here in Redmond, WA. He came to the U.S. a little over a year ago to work for a very large computer company. I have worked a few cw contests with him, and he is extremely active with QRP.

You copied his call correctly, but I guess the QSB monster ate the propagation between you. I am sure that you will hear him in more upcoming QRP contests, as he is always involved.

72,

Ben - NW7DX

In a message dated 00-08-02 15:39:23 EDT, you write:

<<

Did anyone work W7/JR1NKN during the BB contest? (at least that's the call I copied through the QSB) I asked for a repeat of the call which he sent but never came back after I sent him my report.

I was hoping to work him since he was a visitor here in the US but missed him.

Anyone know him/her?

>>

Date: Sun, 6 Aug 2000 17:39:19 -0400
From: "Nick Yokanovich" <k3ny@toad.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [76761] MD crab puts the claw on MN fox
Message-ID: <009401bffff1\$a760bf80\$7cbc21a2@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Jim!

Tnx for picking this crab out of the mud! Your sigs were up and down and we were on the downward side of the QSB. About 15 minutes later you were S9 out here!

73, Nick K3NY Arnold, MD FM19

Date: Sun, 6 Aug 2000 18:12:38 -0400
From: Richard Powell <ripowell@mpna.com>
To: "Low Power Amateur Radio Discussion (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [76762] CONTEST:QRP ARCI Summer Daze SSB Sprint (SSB) *** QRP CONTEST!

Message-ID: <01BFFFFD1.E7B4D960.ripowell@mpna.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

well, i worked my first HF SSB voice contest (other than 10M SSB in the car while mobile)
and managed to stomach 2 contacts before realizing that i'm just not cut out for this HF Noise Mode.
was using a TS450S, running (initially) 10W PEP, couldn't work K0frp, who was qrp, and LOUD, so i upped the power to 50W, tried again,,, still nothing,,,
so i ran it up to it's full 100W, and he gave me a 55. ok, he was 57. ok, so, lets try this other guy, in texas,,, n5jb, who i have worked soo many times in other contests,,,, he's down on 20M, specifically giving out qso's to qrp'ers ! (Thanks!) even at 100W, it took me about 15 minutes of calling before i broke through all the other REAL qrp stations!

I also finally actually made a couple of contacts on PSK31... lots of work there too... had to run 40W to get ANYONE!

ok, my antenna can't be THAT bad,,, i got the fox on 3W on the SAME ANTENNA (a real 3W, from my MFJ9020!) (battery is getting low)

so, the point is,,,

HF SSB, been there, done that, not interested.
PSK31, been there, done that, sorta neat
but, i think i'll build something for 160M CW.

72 & oo's
/rick

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Richard Powell, WB6JBM, TENTEN 13044, QRP-L 1118,
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MCSE, CNA.

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ICQ 39245532

Date: Sun, 06 Aug 2000 16:21:58 -0600
From: "James R. Duffey" <jamesd1@flash.net>
To: qrp-l <qrp-l@lehigh.edu>
Subject: [76763] Antenna Tuner Efficiency Studies
Message-ID: <B5B34126.1F8D%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Bob Kellog. AE4IC, is the guy who did the excellent studies on the antenna tuner efficiency.

They are archived at:

<http://www.qsl.net/~wd8rif/archives.htm>

Sorry I did not have this information earlier. - Dr. Megaycle KK6MC/5

--
James R. Duffey KK6MC/5
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Sun, 06 Aug 2000 18:36:32 -0400
From: David Hinerman <dlh1009@ritvax.isc.rit.edu>
To: qrp-l@lehigh.edu
Subject: [76764] Re: New Fox killer radio
Message-ID: <3.0.6.32.20000806183632.0079cb20@vmsspop.rit.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 02:09 PM 8/6/00 -0700, you wrote:

>Yes, I have been thinking about using a DSP and a A/D & D/A pair
>to do both receive and transmit. It is a little known fact that the
>Tayloe mixer run in reverse directly produces SSB signals given properly
>phased audio inputs.

Dan,

I was aware of that - and was hoping to capitalize on the effect. It looks to me

that the Weaver method is really a quadrature detector followed by a quadrature modulator. The detector converts an Rf signal to DC or a VERY low frequency signal, and the modulator converts it back up into an audio frequency that is comfortable for human hearing. In other words, it's an image-rejecting downconverter followed by an image-rejecting upconverter. Just that the final frequency is within the human hearing range.

>I used to think that my SSB generator idea was kind of cute and original
>until someone sent me an old article that showed SSB transmission being
>generated using the four phase outputs (0, 90, 180, 270) of an R/C phasing
>network being muxed with a 4x clock to a single RF output. Just add a low
>pass filter to clean up the 4x clocking stuff and you have a SSB signal,
>which
>could include cw. I tried it. It works. It is an interesting way to get
>about 50 mw of SSB (or cw or PSK) using nothing but audio and a high speed
>mux.

D'oh! I wanted to do that! (Grin) Actually, that's why I was looking at the Weaver method - I think using your mixer at an audio rate could provide the I and Q audio without the critical phase shift circuits. The Weaver method requires lowpass filtering in the I and Q audio lines, but I'm not sure how closely the phase and gain of each filter must be for acceptable performance.

>A DSP is on my list to try some time, but current high accuracy A/Ds are
>power hogs (that should improve over time), which does not meet my
>requirements for low power portable stuff. Beyond that, folks like TI want
>big bucks for their DSP code development software and debugger environments.
>I wish they had more of the Microchip (pic processors) spirit where the
>development stuff is either free or dirt cheap! And free for 30 days
>does not count!

I agree - Motorola used to do it right, at least for the 8-bit processors and controllers. They were giving away assemblers and monitor programs when I was paying Intel \$2k for 8051 assemblers.

For low power portable gear, I think the best DSP is probably the one we all have installed already. But for a home station, I'll be the PC could do a lot... hardly low power, though.

One thing that might help... if the lowpass filtering of the Weaver method isn't too computationally intensive, a simple controller like a high-end PIC -might- be able to keep up. (At work we're using a Hitachi SH-1 to do continuous harmonic analysis and deriving power measurements on 6 power line signals. It's quite a chip, and it's fairly low power for a 32-bit controller.)

I'll quit bugging you so you can get that new rig going. (Grin)

Dave

Date: Sun, 6 Aug 2000 18:04:01 -0400 (EDT)
From: Richard Brittingham <rbritt@visi.net>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76765] Indoor 20 Mtr antenna help please
Message-ID: <Pine.GSO.3.96.1000806175731.26386B-100000@ankara.visi.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi,

I have a job that requires lots of travel and I run a HW-8 mostly on 20 meters due to 40 and 80 meter antenna being too long. I have tried putting wire out the window and using a tuner but this arrangment doesn't give good results. I am looking to see if anyone has been able to put up a indoor dipole or any other antenna into use in a motel room?

I only run a couple of watts and would prefer the 20 meter band as I dont want to use coils and traveling light is my primary objective. I would use a vertical like a hamstick but all I can carry on a plane is travel bag and suitcase.

So I have to use wire and have to have something I can easily assemble.
Thanks..... and 73

Richard W4MCD
rbritt@visi.net

Date: Sun, 6 Aug 2000 15:45:10 -0700
From: "K7FD-N7SG" <cqdx@teleport.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [76766] Re: CONTEST:QRP ARCI Summer Daze SSB Sprint
Message-ID: <000e01bffff7\$fb319980\$85231ad8@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I applaud the QRPARCI for sponsoring the SSB contest, but today's struggle should prove without a doubt the value of CW!

73 John K7FD

>HF SSB, been there, done that, not interested.
>PSK31, been there, done that, sorta neat
>but, i think i'll build something for 160M CW.
>
>72 & oo's
>/rick

Date: Sun, 06 Aug 2000 18:54:08 -0400
From: John Wagner <john@neknetwork.com>
To: 70511.3041@compuserve.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [76767] Re: FOX is busy today
Message-ID: <398DEC90.69644F53@neknetwork.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

KB1ENS meets the fox again. :) That puts me at 2 out of 10 - not too good a showing, but it's been a heck of a lot of fun. Heard him all alone and nary another hound in sight. I think waiting towards the end of the hunt might be the way to go! Ant was the 3/2 wave dipole up 45'. Glad to get this one as I had to sit out thurs due to lightning and the previous two due to travel.

Anyway, the idea of putting a dipole up 10' to work NVIS interests me. I missed the previous two attempts by Al over in NY 'cause I think he was too close. Unfortunately (or not), the remaining fox are in states that I can usually work on 20m. I wanted to try a loop cut for exactly 20m up about 10' with a close in fox to see how it would work. I might just do it anyway to see if I can work some nearby stations.

Seems sort of weird building antennas to purposely NOT work DX, but what the heck, it's a learning experience.

73,

John, KB1ENS

P.S. Doc da' fox coming up this this thurs, all right, can't wait! I

almost wish we could do this every day!

"Wilford D. Lindsey" wrote:

>
> Antenna was a new dipole up only 10', to act as a NVIS. Guess it finally
> worked. I had two other antennas at the ready on the Alpha-Delta coax
> antenna switch, but could not hear Jim at all on them. Glad the NVIS
> experiment worked. Jim is about 300 miles from here, so it was very
> dicey.
>
> Glad you got yet another pelt, and I will indeed be Da FOX this coming
> Thursday evening. Hope to hear you then.
>
> 72/73,
> --W.D. (Doc) Lindsey
> DSBF
> PO Box 6028
> Bismarck, ND 58506
> (Shipping = DSBF, 2020 Lovett Ave, Bismarck, ND, 58504)
> E-Mail = K0EVZ@arrl.net

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John Wagner - john@neknetwork.com
Web page: <http://www.neknetwork.com>
Personal Web page: <http://www.together.net/~jwag>

Date: Sun, 6 Aug 2000 18:58:41 EDT
From: NB6M@aol.com
To: cbjohns@mn.mediaone.net
Cc: qrp-1@lehigh.edu
Subject: [76768] Re: Antenna Tuner adjustment question
Message-ID: <28.8fcf46c.26bf47a1@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Whichever type of manual tuner you are using, I think that setting the capacitors to mid point in their range and then adjusting the coil for loudest received noise or signal is the best starting point.

You don't know at first whether you are going to need more or less capacitance in either tuning cap for best match, so setting them at max capacitance would seem to limit your ability to get the best match right away.

After adjusting the coil for loudest received signal, adjust both tuning caps for best SWR while transmitting with low power. Depending on the impedance

being matched, this may or may not be zero reflected power.

If it is not, experiment with turning the antenna tuning cap a small amount in either direction and then transmit low power once again and try tuning the transmitter tuning cap for a lower SWR.

If that direction of movement didn't result in lower SWR, try turning the antenna tuning cap back past where it was before to a new setting a small amount in the other direction, transmit with low power and again tune the transmitter tuning cap for lower SWR.

If neither direction of movement with the antenna tuning cap resulted in a lower SWR reading, do the same exercise with small movements of the transmitter tuning cap. Move it a small amount in either direction, and with a small amount of output power, re-tune the antenna tuning cap for lowest SWR.

If that direction of movement did not result in lower SWR, go back the other direction with the transmitter tuning cap, just past its original position, transmit with low power again, and tune the antenna cap for lowest SWR.

I have found that by experimenting in this way, even though the initial SWR reading might have been "acceptable", I am usually able to get the reflected power right down to zero. Only in some extreme cases of mismatch have I had to accept less than zero reflected power.

Once you have the reflected power zeroed on low power, adjust your transmitter for the full amount of power you are going to use, and retune the tuner. It will usually need re-tuning with the rig set at high power, and you want to get the reflected power down to zero, if possible.

I agree that most of the attenuation of spurious output is taking place inside your transmitter, or should be, and it seems that if your inductor setting results in capacitor settings near the center of both their ranges, that inductor setting is best for that band, as you probably will have to retune slightly, and should, if you change frequency by more than a few Khz. After all, especially with QRP power out, less reflected power is of more importance than if you were QRO.

I use a manual tuner on my sailboat, tuning part of the rigging as a random length loop, for all HF frequencies, Marine SSB and Ham, with very good results. The current one I am using was a 300 watt capability tuner of AEA manufacture, with dual meter movements and a built in dummy load, and was quite reasonably priced. I am using the MFJ 971 tuner at the home shack, the antenna being a 135 foot dipole fed with ladder line, for all HF bands.

The above tuning procedure gets the reflected power right down to zero on almost all frequencies and bands.

I built one of the SPC tuners published by the ARRL several years ago, and

used the same tuning technique with it, both here at the house and on the sailboat, with good results.

Occasionally, with a tuning inductor that is adjusted by a switch going to taps on the coil, you may find two positions that give you equally loud received signal on your initial adjustment. Pick one or the other, and go through the complete tuning procedure described. If that results in zero reflected power, and neither of the tuning caps are at either extreme end of their tuning range, fine. If the reflected power does not zero, or either tuning cap is at the extreme end of its range, try the other coil tap position.

72

Wayne NB6M

So, even if your initial SWR seems "acceptable", give the experimental procedure I described a try. You should be able to get your SWR right down to zero reflected power on almost all frequencies.

End of QRP-L Digest 1905
